

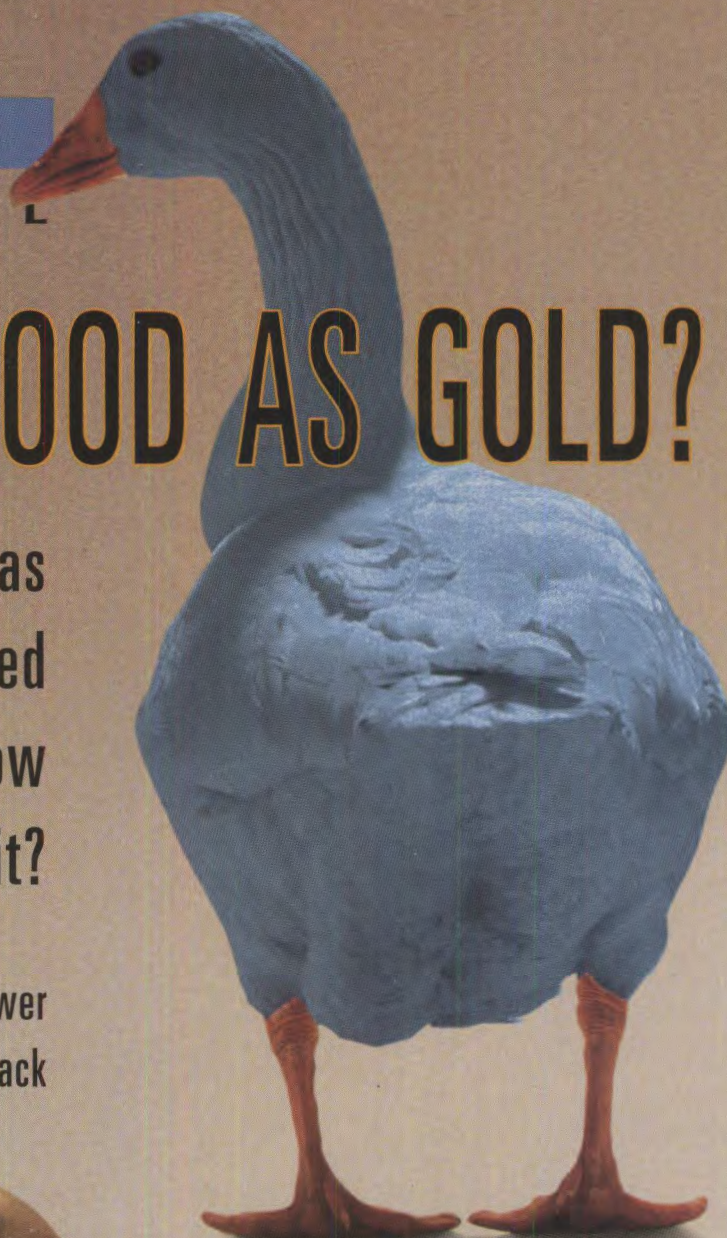
DECEMBER 1994, VOLUME II, NUMBER 12
OS/2 FOR CORPORATE AMERICA



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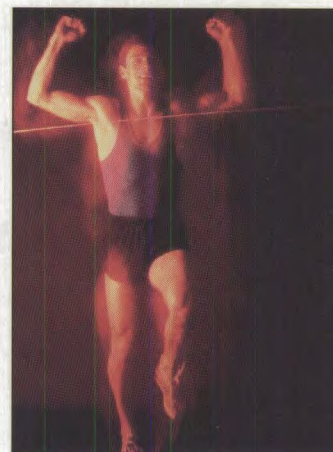
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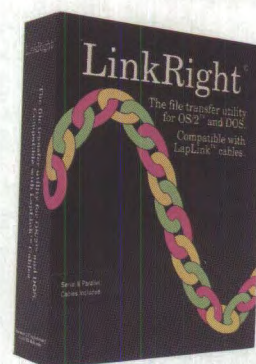
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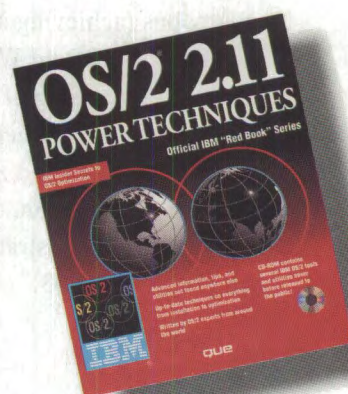
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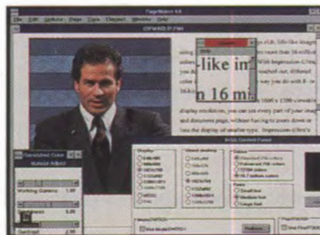
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New Version!

Thanks for 1994

I have good news and bad news.

The good news is that *OS/2 Professional* is wrapping up a great year. In April, we received the Computer Press Association's award for the best new computer magazine of the year for 1993. And we tried to better ourselves in 1994. To do that, we put together some dynamic editorial, including our Bloodhound series and our scoop of the Warp launch.

Our coverage of OS/2 has genuinely made an impact, on both IBM and the marketplace. Thousands of *OS/2 Professional* readers have migrated their corporate desktops from Windows to OS/2, in large part because of our editorial coverage, according to our reader surveys. And we spurred IBM to make serious changes in the way it markets OS/2 and serves corporate America.

Your support has made *OS/2 Professional* the best read OS/2 publication in the world, with the most loyal readers and the most advertising. Moreover, readership studies show that the vast majority of our subscribers keep their copies permanently and jealously guard them; they won't even share. We couldn't ask for more.

OS/2 Professional has sold out all of its advertising space since August—and we did it without relying on IBM. We continue to make it possible for ISVs large and small to penetrate the OS/2 marketplace and justify their continued presence on the platform.

Our forum on BIX, os2.pro, has become a central exchange for meaningful news and information on OS/2 where people can enjoy the OS/2 community.

We invented *OS/2 Express* in the spring and it has been an overnight success, growing at the rate of 25 percent to 50 percent per month. Each week, *OS/2 Express* helps hundreds of corporate Windows sites make the switch to OS/2 apps and Warp itself.

We have been adding staff at the rate of about one per week since late summer. Our organization now publishes another magazine in an unrelated field, and we expect to have four magazines by this time next year.

And now for the bad news. We added voicemail. Sorry; I hate it.

But none of what we accomplished this year would have been possible without the extraordinary energies of a number of individuals. So as we conclude our year, I'm thanking them publicly. On our staff, our guru, Editor Brad Kliewer, as well as editors Alan S. Kay, Claude d'Hermillon and Susan Cooke Anastasi, and columnists Michael Kogan and Gordon Scott, plus a squadron of topnotch contributors, have all worked hard to find out what makes OS/2 organic and beneficial to society.

Those beautiful covers that so many readers love and the exquisite page layouts are the combined efforts of a talented creative team headed by Art Director Elizabeth Black and Associate Art Director Susan V. Levine.

Putting the magazine together is the formidable task of our publishing team, including Assistant Publishers Richard Dubin and Margaret Dutcher, Circulation Manager Christine Garwick-Foley, Advertising Traffic Manager Alexa McDonald, and our advertising representatives John Muller and Frank Salamone. And absolutely, of course, our dedicated and growing team at *OS/2 Express* led by Jan French.

Many in IBM have been very supportive, despite our occasional tussles in the name of OS/2 advancement. I'd like to

thank Mark, Ian, Patrice, Allison, Rob, Keith, Pete, and yes, Lou. And of course, we thank the many IBMers who regularly fax us, call us, and ship just minutes after it happens what we need to stay on top of everything going on. That includes our sources: Deep Chip, Deep Blue, Deep Texas, Deep Florida, Deep New York, and of course Deep Doo-Doo.

I close this year with thanks to so many. You have let us into your lives and into your desktop personas. Thank you for that trust.

Back to the *OS/2 Professional* staff, I have a special thanks: a vacation—actually two. One in summer, and one after Comdex. Next year, *OS/2 Professional* will publish ten instead of 12 issues. July-August and November-December will be combined issues so our staff can take a breather, even as we produce twice as many publications. Thanks for 1994. See you next year. ♦

Edwin Black



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Comments, criticisms, and observations

Keep on Trekkin'

For crying out loud! Is it just me, or is it becoming impossible to read an issue of *OS/2 Professional* without stumbling over reference after reference to *Star Trek*? Don't get me wrong. I enjoy *Star Trek* as much as the next guy, but c'mon. I have images of *OS/2 Professional* staff meetings replete with Spock ears and "Beam me up, Scotty's" and "Make it so, Number One."

Granted, IBM's choice of code names for their latest OS/2 product releases is noteworthy, but in the last couple of years there have been no less than three covers devoted in some way to *Star Trek*. And articles are fraught with these references, whether related to IBM code names or not.

Our \$2 billion corporation recently decided to adopt Windows as our corporate desktop, replacing OS/2, much to the chagrin of many of us in MIS. The people in our organization who drive these decisions are not the ones who tune into *Star Trek*. They're more likely to be watching *Wall Street Week* and *MacNeil/Lehrer Newshour*. Maybe there is a lesson in this for both *OS/2 Professional* and IBM.

Mark Van Praet
Chatham, Ontario, Canada



*We don't know
what you're
talking
about.—*

*Edwin Black
and Bradley
D. Kiewer*



Getting Warped

I've just returned from the OS/2 Warp kickoff. What a show! I was pleased with what I saw, but I was also disappointed.

This release of Warp is really the OS/2 for Windows version, not the "full" Warp package with WIN-OS2. Not once was this mentioned during the presentation. Once I digested this fact, some of the luster left the presentation for me. Hasty consultations with other tech reps suggested that I could install this version on my PC as long as DOS was present prior to my installing Warp.

When I was able to put aside my initial feeling that I, an OS/2 user who never has had and does not ever intend to have Windows on any PC I own, had been abandoned by IBM, the marketing move made sense. To convert Windows users, they must be met and convinced on their own turf. This also goes back to one of the original OS/2 campaign slogans "A Better Windows Than Windows." Warp is all that and more.

Timing is everything and Big Blue must fill the vacuum created by the absence of the often promised Chicago. I am willing to put my pride aside and wait a little longer for Warp with WIN-OS2. I just hope IBM can turn out the "full" version of Warp as quickly as promised.

Mitchell Small
via CompuServe

Nice coverage of Warp in *OS/2: The Next Generation* [Special Report, October]. As a 2.1 user I'm utterly confused about whether I'll lose anything by not waiting for the "full" version of Warp (with WIN-OS2). I have what amounts to two full Windows installations hogging my hard disks: WIN-OS2 and WfWG 3.1, which I use on my ever-less-frequent boots into DOS.

As far as I can tell, I can install Warp over my WfWG installation, erase my whole WINOS directory, pick up tens of megabytes of disk space, and lose nothing. Yet, I'm terrified to do it

because I figure there's a secret "gotcha" I don't know about.

Should WIN-OS2 users jump into Warp and not wait until January? What would we lose if we did?

Bob Hahn
via CompuServe

We revisit the question of upgrading to Warp in this month's Special Report on page 18. IBM reports that the full-pack version of OS/2 Warp, containing the WIN-OS2 code, will be available early in 1995.

I just read *Working at Warp Speed* [Special Report, October] and Mr. Black's follow up. The BonusPak sounds nice, but the no stall install you mentioned is something OS/2 needed a long time ago. I hope the WIN-OS2 versions of drivers are simultaneously installed, because OS/2 2.1 did a crummy job of recognizing Windows apps and drivers. I can't wait for the full version and hope 2.1 users won't be let down.

As for *Phasers on Stun* [Special Report, October], in my opinion, it sounds like Mr. Black should work for IBM! One point though: in closing, he misquotes Mr. Picard. I am certain that the more appropriate Jean Luc phrase is *Engage!*

Peter Tsilerides
via CompuServe

Press on on Preloading

In reading your October issue for news about the new version of OS/2, I was glad to learn that IBM will actually preload OS/2 on their own machines instead of treating its most popular product as if it didn't exist. How difficult can it be to convey the image of a unified IBM? I urge IBM to strongly press computer manufacturers who have agreed to preload Warp to display the OS/2 logo in their ads and state in writing that v3 can be placed on their new PC. Let's end this practice of allowing companies to act as if OS/2 were a bad word. If IBM must throw money at the

INPUT

problem, so be it, but I'm tired of vendors making OS/2 users feel like second class citizens.

Gilbert Pili

via America Online

No NT on the PowerPC!

After reading *PREpping for Prime Time* [Eye on the Market, October], I couldn't agree more with Michael Kogan. IBM should wait until OS/2 for PowerPC is ready for prime time and should have a number of applications ready when they finally ship it. Making Windows NT preloaded with PowerPC machines will hurt the rest of the OS/2 market. IBM Power Personal Systems should focus on building better Power PC machines to compete with Pentium or P6 by using a PowerPC 615 processor. If IBM can deliver OS/2 for PowerPC as good as O/2 Warp v3, and make the migration path from existing

Intel base application to native OS/2 for PowerPC application as cheap and easy as possible, then IBM will benefit in the long run.

IBM personnel should be united in backing OS/2 as the operating system of choice. Maybe IBM could further streamline its workforce by laying off its Windows-minded workers. IBM could convert millions of computer users to OS/2 by exhibiting strong support for OS/2.

Hartono Nugroho

Indonesia

Warp Priced

If IBM really wants to make OS/2 the operating system of the average person, it should extend the \$24.95 OS/2 2.1 for Windows offer indefinitely and put it into every computer software store that sells games. At \$24.95, it's cheaper than any other DOS memory manager,

and gives games up to 620Kb of DOS memory. Now *that* will convert your youngest DOS users permanently, as well as many older gamers that now run DOS/Windows. That's a big market. And, at \$25 it's half the price of most games!

Granted, a number of games don't run well under OS/2, but that can be solved by configuring the system for dual boot.

IBM can make OS/2 the CD Player of operating systems. Given the right price and the right niche, everyone will want one.

Hal Olsen

via the Internet

On Chaos

You will probably get a ton of mail on Jerry Pournelle's concerns about OS/2 getting through a Windows crash [The View from Chaos Manor, October]. If

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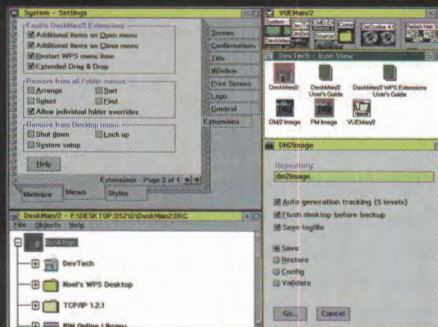
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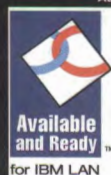


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INPUT

I understood him correctly, the solution is to make one change to the Windows application's WIN-OS2 Settings, to "KBD_CTRL_BYPASS." If this is set to "NONE" you will always be able to get to OS/2 using CTRL-ESC.

Alas, IBM doesn't make this the default, so you will have to ensure that it is done on each Windows icon.

Art Sulger

via CompuServe

Jerry Pournelle's observations range from slightly misinformed to completely ludicrous. The latest example is his observation in the October 1994 issue [*Words to the Wise*, The View from Chaos Manor] that "IBM simply must get you through a Windows crash and back to OS/2" and that, for lack of this, "[he doesn't] dare use OS/2 on [his] primary system." His underlying premise probably is mostly true: IBM should

make all attempts to help you through a Windows crash. His conclusion, however, is patently false—this should not lead a user to decide to scrap OS/2. Instead, it should lead him to replace his crashing Microsoft software with native OS/2 apps!

Brent J. Nordquist

via the Internet

We don't need whining. What we do need are upbeat, positive and negative, reviews. Pournelle's most recent ending, "I don't dare use OS/2 on my primary system. Writers really hate to lose text," just blew me away. What's he talking about? Anyone who uses a computer seriously knows that data is transient until saved. Is Pournelle implying that OS/2 is less stable than Windows?

"Windows in DOS traps Ctrl-Alt-Del and lets you terminate a bad application without resetting the

machine." Please—have you read the instructions for that? You are supposed to restart Windows. Sometimes it kills the application; most times you are returned to a black screen.

I don't believe you should hide bad news, just be careful. Can you honestly say that it's a fair statement to imply that anyone who cares about their data can't use OS/2 because a Windows program might crash?

There is a lot to be said for tact and tone regarding information, both good and bad. Jerry's column is a whiny place to be and I wish you would change it.

Scott Anderson

via CompuServe

Nice Launchpad

This is several firsts for me: My first letter to *OS/2 Professional*, my first attempt at sending a fax (FaxWorks for

continued on page 73

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BYTES & PIECES

News and trivialities, important and obscure

Smarter than the average launcher

Lotus's new SmartCenter, like the Warp Launcher, is an icon based control bar that provides quick one-click launching and switching among applications, and aids users in getting work done fast while keeping the desktop clean. (Currently, SmartCenter is available in the SmartSuite Value Pack for OS/2, and will be bundled with SmartSuite beginning early next year. (See Marketline, page 65.) Unfortunately, it is not available as a separate product—or, even better, bundled with Warp.

That's a shame, because SmartCenter is the best tool we've seen thus far for improving the Workplace Shell's usability. In addition to providing quick access to the shut down, lock up, window list, find functions, and a quick-access program icon bar, it also provides a neat "start object" button. This button allows rapid single-click navigation of your objects and their contents, making it possible for you to find and start programs that aren't in your quick access area. SmartCenter also includes an integrated system monitor that shows disk space, CPU usage, battery power, and a clock/date/timer.

Integrating Lotus's SmartCenter into Warp would advance OS/2 Warp's user interface far past that of next year's Windows 95. Furthermore, standardization of the underlying object classes and interfaces would make it far easier for application writers to integrate their programs with each other and the Workplace Shell. With the full pack and a potential manufacturing refresh of Warp coming in the first quarter of 1995, it may not be too late for IBM to recognize this opportunity and take advantage of it.

\$1,000 reward for info on software piracy

OS/2 Professional has offered a \$1,000 reward for information leading to the indictment and conviction of the individuals responsible for placing copies of



OS/2 Warp, DeScribe 5, a beta version of Windows 4.0, and

other copy-righted software on a bulletin board accessible from the Internet earlier this fall. Two of the companies involved have

also offered rewards—DeScribe (\$20,000) and Microsoft (\$10,000).

"This act hits OS/2 on its home turf," said Edwin Black, OS/2 Professional's editor in chief and publisher. "Whether the vendor is a giant corporation like IBM or a struggling company like DeScribe, this kind of infringement activity hurts the growth of OS/2 software."

The software was posted on a bulletin board not long after a debate that raged on the boards and in print concerning DeScribe President Jim Lennane's proposed anti-piracy measures. Lennane had modified the word processor code so the application would expire after six months, requiring a code refresh that would be available to registered users only. In the face of the ensuing uproar and the inconvenience, Lennane backed away from his plan, but he says DeScribe will continue to search for ways to prevent the unauthorized use of its products.

Black also called on corporations and universities to start policing their facilities. "It's too easy just to blame the anonymous Internet. Someone should ask whether the operators of computer systems or bulletin boards must share in the liability."

Information on the Warp-DeScribe-Windows piracy can be faxed to the magazine's editorial office at (301) 770-1720; voice messages can be left after

business hours at (301) 770-3333. The confidentiality of all sources will be respected.

Corel comes back

A year after Corel Systems Corp. backed away from its OS/2 development effort, the company's president has told reporters that Corel is planning to release an office suite that will run under OS/2 Warp.

President Michael Cowpland said in a pre-Comdex teleconference that with the release of Warp, "We see potentially renewed strength on the OS/2 side. We see that as an important platform to develop for, and we will be putting a major effort in."

That effort will be focused on developing a 32 bit CD-ROM-based office suite to be offered in both Warp and Windows 95 versions. The suite, which a Corel official says is scheduled for delivery in the summer of 1995, will include word processor/desktop publishing, spreadsheet, and database applications. The word processor will be based on the Wordstar code Corel owns, Ventura Publisher, and CorelDRAW's user interface. Cowpland implied that the other two applications will be based on third party code with Corel's user interface added.

Cowpland's decision is the best indication to date of the improving state of IBM's relations with software vendors. Last summer, Corel spokeswoman Fiona Rochester told OS/2 Professional, "Our ability to deliver for OS/2 was, and remains, dependent on IBM's provision of adequate porting tools including filters, device drivers, and OLE emulation." At the November teleconference, however, Cowpland said Corel is working closely with IBM. He added that development for OS/2 should also lead to the possibility of developing software for the PowerPC platform.

According to Cowpland, the suite will likely be priced below Microsoft Office.

Consulting firm exploits the benefits of OS/2

There are thousands of stories in corporate America of OS/2 providing the tools and the environment to save companies from their legacy systems. This is one of those stories.

Hewitt Associates is a Lincolnshire, Illinois compensation and benefits consulting firm. Its benefits administration systems operations were running on a mainframe with terminal-based recordkeeping systems and DOS based desktop applications. By 1989, that IS setup wasn't serving the firm's productivity needs. So Hewitt developed an OS/2 based system that is a breakthrough in software technology for employee benefit administration.

According to David Pierce, a manager of systems and technology at the company, Hewitt's decision to migrate to an enterprise OS/2 system was part

of a strategic initiative to build a next generation solution that would work for a diverse client base and be simpler to maintain.

The client/server based system, called Total Benefit Administration, supports multiple front ends, a Telephone Support Center staffed with knowledgeable account representatives, a telephone Voice-Response Interface for plan participants, and kiosks.

From the customer perspective, the re-engineering of Hewitt's information system gives plan participants the ability to query 401(K) balances and get information about fund transfers, loan requests, flexible benefit enrollments, and pensions through a voice response system. If the customer needs more information, the call is switched to a customer service representative who taps into a database and reports the

findings back to the customer—all in a matter of seconds.

TBA is a scalable system, constructed using object methodology and a proprietary class design. It encompasses a common data store for contribution, benefit, flexible and group benefit information, and supports recordkeeping, benefit planning, and employee communication. The system has interfaces to payroll/personnel systems as well as a range of outside organizations, including trustees, investment managers, and insurance carriers.

"We discovered during development that TBA could exploit the power of OS/2's true multitasking, multithreading, and flat memory model environment," commented Pierce. "Internally, OS/2's ability to run multiple applications, including Windows applications, gave our users a big productivity boost." ♦

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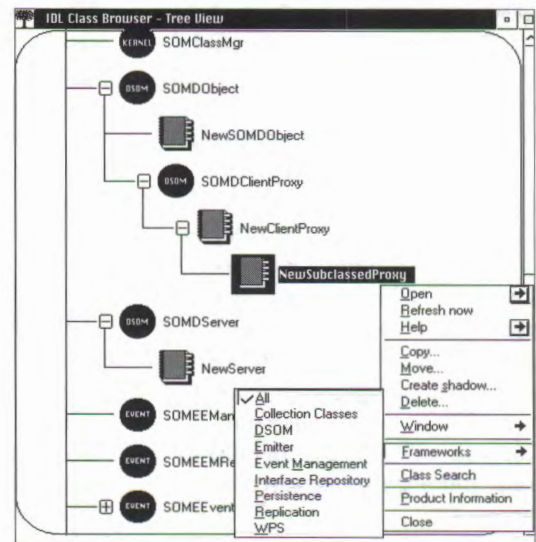
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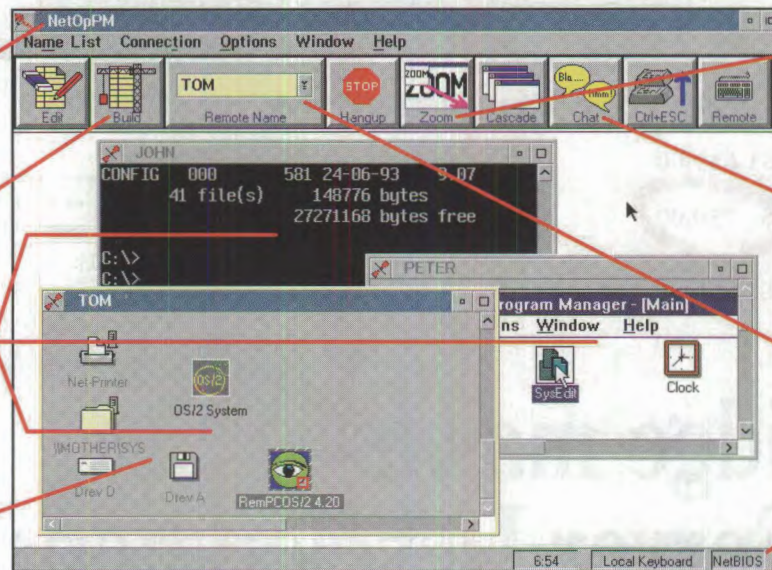
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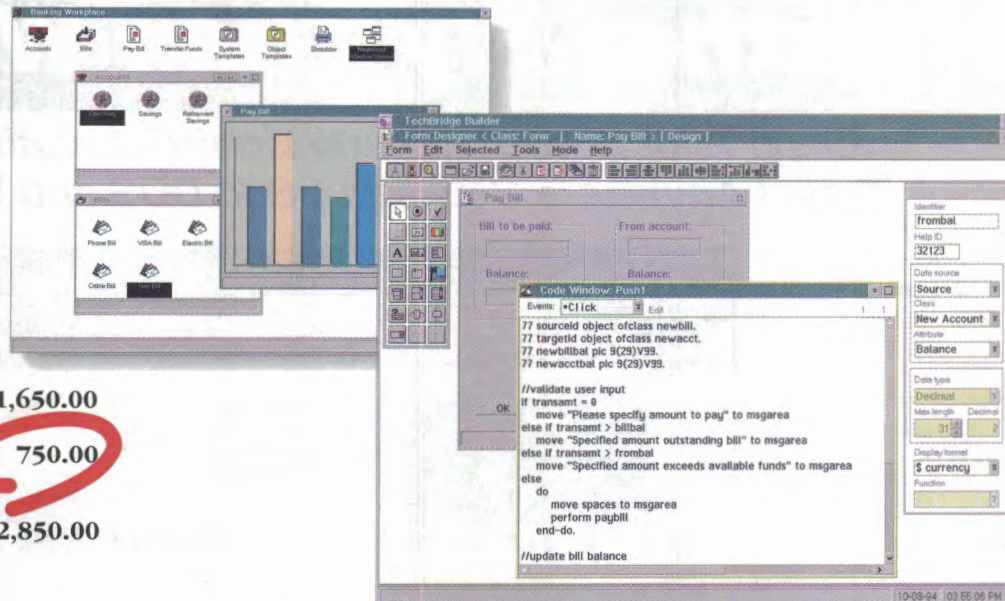
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December 1994 OS2 Professional 15

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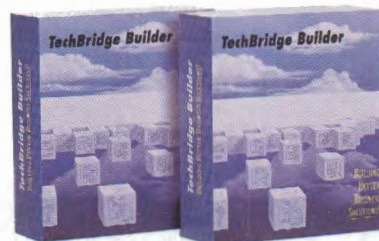
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Death to DOS Names!

BY BRADLEY D. KLIEWER

When OS/2 and Windows were first touted as the successors to the DOS throne, IBM and Microsoft promoted device independence as a driving force. Both have largely succeeded. For example, when you install an OS/2 or Windows application, you no longer must slog through a long list of printer or display configuration options.

Unfortunately, though, vestiges of DOS-based conventions continue to haunt the newer operating environments—most visibly in the naming of ports and peripherals, especially when connecting to LANs.

A desktop system's hard disk configuration illustrates the point. If you've ever added a second drive to a DOS/Windows PC, you may already be familiar with the problem: what will the new drive be called? The answer varies with the current partition configuration and the type of hardware. If your existing disk has two partitions, drive C will remain drive C, the original D drive will be renamed drive E, and the new disk will become drive D. You can work around the problem using FDISK to place only an extended partition on the new drive while setting no new primary partition. Then the new extended partition will become drive E, leaving the originals in place as C and D.

Of course, this simple solution assumes that the new drive is of the same type as the old. If you add a SCSI drive and controller to an IDE system (or vice versa), the order may change. And if you have a CD-ROM installed, its drive assignment will be bumped up beyond the hard disks. These reassignments wreak havoc with applications that address a specific drive letter.

Like drives, DOS printers used colon-delimited device names (LPT1:, LPT2:, etc.) tied to a specific piece of hardware. OS/2 provides a much more convenient model for insulating applications from physical port changes. PM-based applications address the printer by a port-independent name. I can call my local printer HP LaserJet, my LAN printer PCL5:IBM 4039, and so forth.

This is extremely useful in a LAN environment because DOS provides very limited parallel printer addressability: LPT1, LPT2, and LPT3. My system connects to three unique printers via the network alone, leaving no spare addresses for my local printer or my fax software, which emulates a printer.

With native OS/2 applications, the problem disappears—I simply address all five devices by name. When using DOS applications, OS/2 maps three of the devices to whichever LPT port numbers I designate. This structure adds overhead to DOS oper-

ations, since I must reconfigure settings to move among all five printer devices. Windows straddles the line, addressing printers with names such as HP LaserJet on LPT1. By adding a higher printer number to the WIN.INI file (e.g., LPT4.OS2), you can mix OS/2's ability to assign ports beyond three with Windows' named devices.

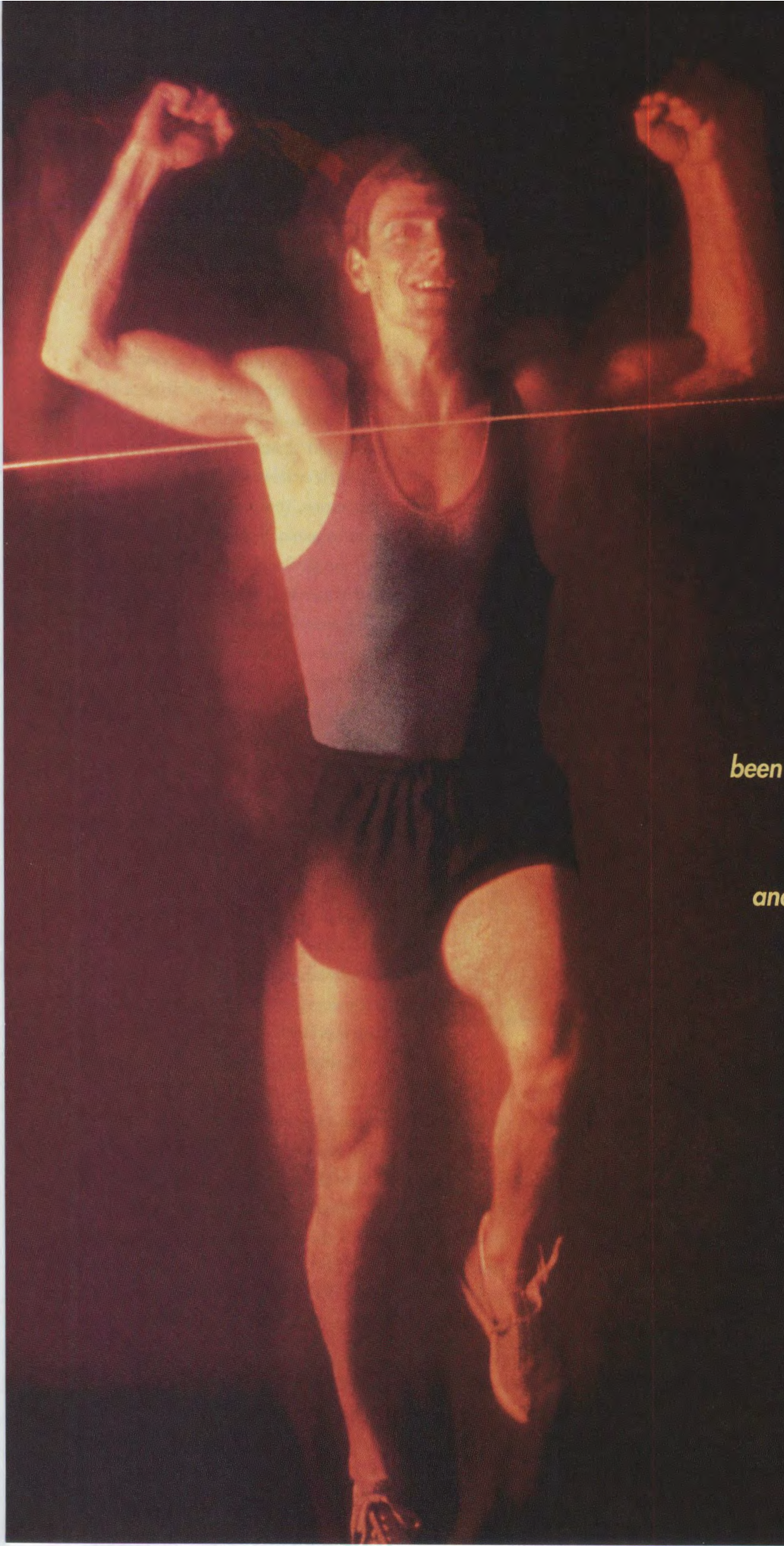
But providing named printers is only part of the job. IBM could improve disk drive access and OS/2's internal consistency by adopting similar conventions for drive accesses. Such techniques have been used by Unix and its derivatives for years and under those OSs, storage

devices have names.

Two pieces of the foundation needed for naming disks have already been laid. First, OS/2 has in place: a user-defined volume name and a unique serial number assigned at format time. Second, LAN Server provides a convention for addressing storage by name. To see a file listing for the LANG device on the DKS1 server, I can type DIR \\DKS1\LANG. If programs that need drive names must access \\DKS1\LANG, I can map the alias to whichever available drive letter I choose. Now IBM should finish the job.

As we move away from DOS, we must also lay to rest its anachronistic conventions. Some day, when the remnants of DOS have been completely swept away, we will look back on our drive letter names and laugh. ♦





*Warp has arrived.
The rollout may not have
been pretty, but the new version
of OS/2 is now in stores,
and increasingly on desktops.
Should you join the race
for the winner's circle?*

BY BRADLEY D. KLIEWER

Going for the Gold

If T.S. Eliot were reviewing Warp, he'd write the cruelest month isn't April, but October. Why? Because this October saw the launch of OS/2 Warp, version 3.

The reaction has been mixed. While praising many of Warp's advances, early adopters, including many long-time OS/2 fans, have voiced a chorus of concerns over the new release. Confusion surrounding IBM's launch strategy and curiosity about its marketing campaign have fed the initial FUD (fear, uncertainty, and doubt) that accompanies significant announcements in the computer industry.

What is influencing many observers is actually not the new product itself. Rather, it is the longstanding perception of OS/2, the operating system, as difficult to install and offering too few useful native applications.

The uncertainties of Windows 95 fuel the fears and doubts of those considering an upgrade to Warp. Never mind that to take full advantage of multithreading, long file names, and an improved user interface, Windows developers will need to redesign their applications for Windows 95. While major new features remain in beta and thus out of users' hands, the promise of a "better" system remains an elusive pot of gold at the end of the rainbow. Were it not for the expectations surrounding the future release of Windows 95, the initial stumble in distributing OS/2 Warp gold code would not have caused such a stir.

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SPECIAL REPORT

But it did. Racing to get on store shelves, IBM imposed a set of impossibly tight production deadlines. Predictably, that led to some problems in the initial production run. Just as the manufacturing line was cranking up, IBM uncovered a minor bug in the installation program. The offending code was rewritten and production resumed.

The Rush to Market

Warp thus got off to a shaky start. While the bug did not lead to fatal crashes, on some installations it produced some rather annoying effects. For example, at boot time some users were greeted with error messages about unrecognized CONFIG.SYS statements. The problem stemmed from improper conversion of the system files from DOS to OS/2, and occurred only on DOS-based systems that had copies of CONFIG.BAK and/or AUTOEXEC.BAK on the root of the installation target drive.

OS/2 Professional uncovered yet another conversion bug: when installing OS/2 Warp over an existing copy of OS/2 for Windows, the Install program crashed near the end of its run while converting AUTOEXEC.BAT. In fact, we discovered that this AUTOEXEC.BAT problem was the cause of the install crash we reported in the October cover story on Warp Beta 2—a bug that managed to survive through the Gamma, the initial production run, and the new revised gold code. (As we reported, while the Install program crashed, it had managed to complete enough of its operations to reboot and run Warp without ill effects other than a default, rather than converted, AUTOEXEC.BAT.) On another revised gold code install, OS/2 doubled up the multimedia device driver statements and would not run until we manually edited the CONFIG.SYS.

We found a disturbing number of problems in the Beta 2 code. Some of those were fixed, but others remain. The configuration program no longer mangles the names of existing swapper directories or other CONFIG.SYS statements. The swapper allocation routines have been improved (under Beta 2, the swap file would sometimes grow excessively). However, Lotus cc:Mail continues to hinder the shutdown process on some systems and some CONFIG.SYS statements return to default settings rather than retain prior customizations.

Overall, the fix/no-fix mix underscores the rushed production schedules set to meet a self-imposed deadline of late October availability. The period between the end of Warp Beta 2 and the Gamma covered little more than a week, with dozens of revisions compressed into a hectic schedule. To be fair, IBM did not sit

still for the several weeks Beta 2 was in testing. Many intermediate versions were produced during the Beta 2 stage. Furthermore, automated testing systems allowed new revisions to be produced and tested at the rate of one or two per day during the critical periods.

However, in any project as large as OS/2 (or for that matter, Windows NT or the forthcoming Windows 95) many bugs will slip by unnoticed. The *real* testing that a beta phase tries to simulate doesn't start until the product arrives in the hands of real users and gets loaded onto the myriad combinations of existing hardware and software that plague the so-called PC "standard."

A Week's Slippage

It's difficult to meet demand on a high profile item when schedules are rushed. IBM had planned on having a production and distribution window of about two weeks to fill the channels. While the bug fix stopped production for only a few minutes, requiring just the time needed to load the new masters, the release schedule slipped by nearly a week.

Some copies of buggy Warp managed to hit the retail shelves before IBM had authorized public release. You can tell which version you have before opening the box by checking the manufacturing ID on the bottom. This dot matrix printed code will look something like 110594CD4212-007 (if there are two, look for the higher numbered code). The first six digits show the date of manufacture: anything dated 102994 or earlier is the old, buggy code. If you have one of these copies, avoiding installation problems requires a simple step: just rename or erase CONFIG.BAK, AUTOEXEC.BAK, and AUTOEXEC.BAT before installing OS/2 Warp.

In fixing the bug, IBM changed only two files on the diskettes. The initial Installation Diskette (called Disk 0 on the CD-ROM images) has a slightly larger README.INS file and Disk 1 has a newer version of SYSINST1.EXE that fixes the CONFIG.BAK problem. However, on the CD-ROM version only the initial boot diskettes contain the repaired code; the diskette images on the CD-ROM have not been updated. If your site creates disks from the CD-ROM or uses the images for network distribution, make sure you copy SYSINST1.EXE from the original CD-ROM installation Disk 1 to the installation Disk 1 you create from the CD-ROM.

With the fix a part of history, Warp is now in the retail channels and on store shelves—although spot checks in early November showed that in many cases it immediately sold out.

The product is not without flaws. Its biggest "flaw," though, has little to do with OS/2. With a platform as varied and non-conformist as the so-called PC "standard," any operating system faces daunting hurdles. Anyone who has tangled with high-performance DOS and Windows drivers can relate installation horror stories. OS/2 is no exception. However, OS/2 supports more hardware right off the installation diskettes than either its predecessor or its competitors do.

The improvements written into the code in Boca Raton place Warp light years ahead of OS/2 2.1. Installing the CD-ROM version of 2.1 over our standard systems (described in detail in *Building Your Own* in our June 1994 issue) required modifications to the installation diskettes. The Adaptec 2742T SCSI adapter we used was incompatible with earlier Adaptec drivers—OS/2 could not read the CD-ROM until we applied the Adaptec-supplied drivers to the boot diskettes. Users with Soundblaster-based CD-ROM drives or other proprietary interfaces faced similar obstacles.

In contrast, Warp supports the Adaptec 2742 along with a host of other SCSI, IDE, and proprietary CD-ROM adapters. The installation program's list of 42 basic SCSI adapters and 94 CD-ROM drives only hints at the wide support for a host of unnamed but compatible substitutes.

Extensive additions to supported sound and video adapters round out the list. The gold version of Warp is less impressive in its video support than it is for sound cards, but it's still better equipped to deal with problems than was the Beta 2. As we reported in October, Warp can detect both the type of video adapter and the type of monitor. The improper synchronization of the horizontal and vertical retrace we reported in the beta was also fixed although the manual, which gives instructions for working around the problem, is now out of date.

In addition to bug fixes, IBM made more substantial changes to the configuration strategy. The system now defaults to VGA video on many systems. If you select the Primary Display icon on the first GUI configuration screen, the system auto-detects the adapter and presents the appropriate choice as the default—on our systems, Mach32, the chipset that drives our ATI Graphics Ultra Pro adapters. Even so, the system reboots to 640x480 resolution after the install process completes. You can then open the System icon in the System Setup folder and select from the resolutions Warp's auto-detection routines have determined your adapter will support.

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At first glance, the process seems awkward. However, it's really a much better strategy than the original. After all, how many people have ever bothered to configure their video adapters to match their displays, assuming such a feature even exists on the adapter? Under the beta method an improperly or never-configured adapter could lead to an unreadable OS/2 display, and the possibility of winding up with damaged hardware. The new process ensures that the display will be readable and usable, while providing a reasonably convenient override option.

Furthermore, should you happen to set the resolution too high after installing Warp, the new boot procedures provide you with a convenient safety net. If you hit Alt-F1 when the OS/2 text appears in the upper left corner of the display, Warp will present a menu of Recovery Choices. From here you can reboot to a VGA-based desktop or the original installation configuration (among others), at which point you should regain a readable display. This method is much better than the 2.1 process of booting from the first two installation diskettes and running a set of arcane command-line configuration utilities.

In fact, if you need command line utilities or the Workplace Shell refuses to boot, another recovery option lets you boot to a standard command shell. Best of all, Warp includes a text-based editor called TEDIT that runs from a standard command line—a long overdue addition to OS/2.

Despite Warp's numerous precautionary measures, nothing is fail-safe. We would like to underscore an important point: when upgrading the computing engines in your enterprise to Warp, back up the system *before* installation. If something goes wrong, at least it will be reasonably easy to recover. We've also compiled a few tips that will help your install run smoothly: see the sidebar *An Ounce of Prevention* on page 26.

Performance and Compatibility

Warp is leaner and meaner than its 2.1 predecessor. IBM claims that Warp will run on a 4mb system. Our tests on a 4mb Panasonic CF-1000 notebook indicate that OS/2 will load and run. We also ran DeScribe 5.0 on the system. The performance was sluggish but usable. The same system was much more responsive at 8mb. In our opinion, you could run OS/2 on a 4mb system in a pinch, but you really should target at least 8mb.

Warp produced measurably faster results than version 2.1 in a number of tests we ran, but the differences were most noticeable with operations that stressed the graphics subsystem. While disk intensive operations such as loading applications improved by a

SPECIAL REPORT

few percentage points, WPS-based operations clocked in twice as fast.

On systems with Microsoft Windows, the WIN-OS2 setup program located in the System Setup folder allows you to select a fast load option for Windows applications. In our tests, fast load shaved only two seconds off the nearly 19 second load time for Word for Windows. And if you run sound enabled applications under Windows, you cannot use fast load, since only the first Windows session to load can access the sound adapter, and fast load counts as a session.

Shrewd Windows users will notice another feature that offers better performance. The Command Prompts folder now contains a WIN-OS2 Window that runs the Windows Program Manager in a seamless Window. You may then launch any Windows application directly from the Program Manager. Using this technique to launch Word for Windows cuts load times nearly in half. By leaving the Program Manager on the desktop (or minimized and ready to activate at a moment's notice), you can circumvent fast load's disadvantages.

We've also been impressed with Warp's ability to fit into the PC environment. We've been using the gold code for a month now and have run into very few incompatibilities. We did discover that Bocasoft's WipeOut Screen Saver had a device driver that crashed the system at load time—only to find a Warp compatible upgrade on CompuServe. We also discovered a problem with cc:Mail (as discussed in the sidebar on page 26) that potentially affects other SOM-based applications.

We expected to find more problems with device drivers. These special programs sit between the hardware and the operating system and tend to be more sensitive to subtle changes in the operating system. Yet most of our older device drivers, including those from LAN Requester, Communications Manager/2, and Backup-Wiz, continue to work under Warp without incident.

IBM may have inadvertently played to customers' fears of

device driver incompatibilities with the announcement that there will be a separate version of OS/2 Warp that will serve as a LAN client. Many incorrectly believe that they cannot use Warp on a LAN until the LAN version ships in January.

Some confusion also surrounds the Windows component of Warp. The version now on store shelves does *not* contain the WIN-OS2 code that IBM licensed from Microsoft; if you do not install Warp over an existing installation of Microsoft Windows, you won't be able to run Windows apps under Warp. The products currently shipping is thus an upgrade to OS/2 for Windows (Ferengi). There will be a version of Warp that will contain the WIN-OS2 code, as does OS/2 2.1 (Borg). This version, also known as the Full Pack, is scheduled to be available early in 1995.

Officially, Warp without WIN-OS2 will install only on an unformatted disk or over DOS, DOS/Windows, or OS/2 2.1 for

Windows. It will not install over the full version of OS/2 2.1—for that, IBM says you'll have to wait for the Full Pack version. However, we have discovered that if you delete the SYSLEVEL.OS2 file, Warp without Windows will install over OS/2 2.1. To do so, though, you must have a copy of Windows

COMPARING OS/2s: 2.1 vs WARP

	OS/2 2.1 for Windows	OS/2 Warp
Open Templates Folder.....	5.4 secs	1.9 secs
Open an application folder	0.9	0.5
Open DeScribe (first time)	16.4	16.2
Open DeScribe (consecutive loads).....	9.7	8.7
Open Word for Windows.....	21.7	18.9
Open Chipsoft Business Depreciation (DOS)	7.4	6.2

3.1x installed as well as OS/2 2.1x. And beware: after installation, you'll have to reconfigure WIN-OS2; the Windows configuration you had in version 2.1 will be lost. We're including a convoluted set of instructions created by *OS/2 Professional* with the copies of Warp without Windows being sold by *OS/2 Express*, but the procedure is time consuming and hasn't been thoroughly tested. In short, it's an option appropriate only for very determined risk takers who have a handful of systems to convert. Most Borg users will be best served by waiting for the Full Pack version.

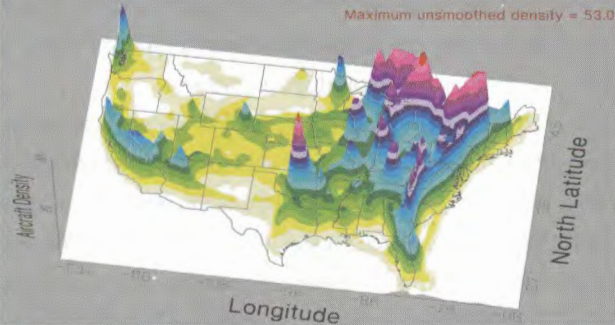
Warping the 'Net

From an interface standpoint, the gold version of Warp has not changed much from Beta 2. It feels a little more polished, with extra items like additional LaunchPad settings and improved

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Circle #235

SPECIAL REPORT

swapper file management. The BonusPak contains all of the announced items except the WebExplorer (which you can download automatically when you connect to the Internet via Warp's convenient IBM Internet Dialer). One feature that was announced, an asynchronous event processing queue, was changed back to the old model: a single, serialized queue. As a result, a single ill-behaved application can still hold your GUI hostage until you break out of it with Ctrl-Esc.

We've now had some time to work with the Internet Connection, IBM's native OS/2 software for accessing the IBM Information Superhighway. For someone like me, who's been accessing the Internet for seven years through ugly character mode terminal emulators, using the Internet connection is like stepping out of a dark room into a sunlit mountain meadow. The Internet access programs are easy to use and full of color. When reading your newsgroups or navigating through Gopher, forget those cryptic single key commands with different meanings for upper- and lowercase letters. Instead, make your choices through inviting GUI elements such as mouse actions, menu selections, or accelerator keystrokes.

The WebExplorer ranks as IBM's crowning achievement within the Internet utilities. Despite its beta status, this program will blow your socks off! This Mosaic-like navigation interface to the World Wide Web acts as a hypertext link to databases throughout the world. Anyone familiar with the hypertext-based help system built into OS/2 will immediately feel at home using the WebExplorer. Just click on the colored text and/or icons to navigate through a multimedia enabled tour de force.

The WebExplorer's power does come at a price—data transfers over the Internet feel quite slow when the graphics images are large. Don't even think about using the WebExplorer with a modem slower than 9,600bps. 14,400bps, the current upper limit through the IBM Internet Connection Service, would be a better choice.

You may have heard horror stories about Internet configuration in DOS and Windows. Not here; the process using Warp is simple. When you open the Internet Dialer to establish a connection, the program prompts you for the information needed to establish and configure an account with the IBM Internet Connection Service. When you first install Warp, the Dialer provides selections for about 150 different modems and 19 local dial access points within the United States (and many other cities scattered throughout the world). After linking to the Internet and updat-

SPECIAL REPORT

ing the software, you will find you've picked up a handful of additional modem configuration options and more than 110 local access numbers in the U.S.

Should you wish to use a SLIP service (a direct Internet connection) through a provider other than IBM's, Warp supplies an Alternate Dialer. Although it is not yet activated, the Alternate Dialer also has a PPP radio button (apparently for use with a yet-to-arrive update that will provide access to the Internet via the Point to Point Protocol).

The Internet Connection seems to make efficient use of Warp as well, too. While exploring the Web on my home machine over the weekend, I was also loading the CD-ROM version of Quick-en 3 in a WIN-OS/2 session, my FaxWorks was minimized and awaiting the next transmission, DeScribe was standing by for note taking, and other Internet connections were busy retrieving data for Gopher and the Newsreader. Throughout this process the system remained responsive and the Internet Dialer window continued to show throughput in the 1,600 bytes per second range, which is normal for compressed data moving through my 14.4kbps connection.

As we noted in the October issue, the other BonusPak applications are well rounded and useful. Overall, the BonusPak paints a handsome portrait using OS/2's native palette of APIs. Warp in particular demonstrates the opportunities that await IBM and third party vendors willing to enter the race for the brightest and best 32 bit applications. This is a market that is quite young and maturing, and once again showing plenty of potential for excellence.

Winning the Gold

In a timed event, the gold goes to the first finisher, and Warp wins that contest hands down. In a judged event, form and technical ability count. Warp does not merit a perfect 10.0, but it ranks high on the scale. We'd give it a 9.8 on form and a 9.4 on technical ability—a little more time and refinement could have eliminated some of the glitches.

We're pleased. We think you will be as well. So let the naysayers whine and console themselves with second place, or chase the end of the rainbow on into 1995. You can go with the Warp—and go for the gold! ♦

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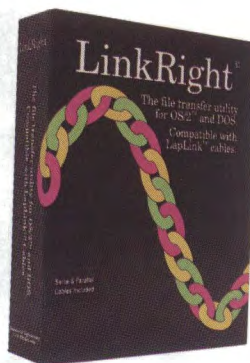
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Circle #277

SPECIAL REPORT

An Ounce of

The following steps will help prevent problems when upgrading your system. These precautions may not be necessary on every system. However, this preventative medicine will add no more than a minute or two to your install time and may prevent time consuming reconfiguration or re-installation headaches.

1. Rename any copies of AUTOEXEC.BAK and/or CONFIG.BAK before installing Warp. If you are installing over OS/2 2.1, also rename AUTOEXEC.BAT. The following steps run from an OS/2 command line prompt will accomplish the feat:

```
RENAM C:\AUTOEXEC.BAK AE.BAK
```

```
RENAM C:\CONFIG.BAK CFIG.BAK
```

RENAM C:\AUTOEXEC.BAT AE.BAT (only if installing over an existing copy of OS/2)

The following steps are needed after installation over 2.1:

```
RENAM C:\AUTOEXEC.BAT AEWARP.BAT
```

```
RENAM C:\AE.BAT AUTOEXEC.BAT
```

2. Disable all references to existing multimedia drivers in CONFIG.SYS. If you're installing over an existing OS/2, you will find a block of DEVICE= statements referring to the MMOS2 directory. Place REM followed by a space in front of each statement (you could delete the statements, but it is more convenient to leave them for reference purposes). For example:

```
REM DEVICE=C:\MMOS2\SB16D2.SYS 1 1 5 5 240 8
```

```
/N:SBAUD1$
```

```
REM DEVICE=C:\MMOS2\AUDIOVDD.SYS SBAUD1$
```

```
REM SET MMBASE=C:\MMOS2;
```

```
REM SET DSPPATH=C:\MMOS2\DSP;
```

```
REM SET NCDEBUG=4000
```

```
REM DEVICE=C:\MMOS2\SSMDD.SYS
```

```
REM DEVICE=C:\MMOS2\ADSHDD.SYS
```

```
REM DEVICE=C:\MMOS2\SMVDD.SYS
```

3. We have heard reports of SOM conflicts that prevent a proper shutdown on some systems. Several of our systems will not shut down properly when Lotus cc:Mail (a SOM-based application) is installed. While not a fatal problem, it keeps changes to the desktop from surviving a reboot. In some cases,

SPECIAL REPORT

Prevention

moving the item to the end of the path statement will solve the problem; in other cases, the SOM-based modules must be disabled. You can disable cc:Mail by removing its entry from the LIBPATH statement (and later re-enable it by adding it back to the end of the path statement).

For example:

```
LIBPATH=C:\CCMAIL;C:\OS2\DLL;C:\OS2\MDOS;C:\;C
:\OS2\APPS\DLL;
```

would change to:

```
LIBPATH=C:\OS2\DLL;C:\OS2\MDOS;C:\;C:\OS2\APPS
\DLL;
```

After rebooting following a proper shut down, change it back to:

```
LIBPATH=C:\OS2\DLL;C:\OS2\MDOS;C:\;C:\OS2\APPS
\DLL;C:\CCMAIL;
```

In general, if you have problems with shut down, make sure the \OS2 entries are the first items in the path statements (including PATH and DPATH in addition to LIBPATH). If you continue having problems, try removing references to applications with SOM-based components.

4. Hardware configuration issues can affect Warp. Most importantly, each interrupt driven ISA-based device should have a unique IRQ address. The IRQ address is typically set through a jumper on the board, although some newer devices set it through software (the MediaVision Pro Audio Spectrum sound adapter and Intel Satisfaxion 400 are examples). Most existing OS/2 based systems should already be properly configured. Nevertheless, we did discover a potential conflict.

Warp no longer requires interrupt driven parallel ports. In fact, the default configuration uses polling techniques, thus potentially freeing IRQ 7 (the standard LPT1 IRQ) for other devices. The installation program takes advantage of this fact when installing the MediaVision Pro Audio Spectrum, which defaults to IRQ 7. Unfortunately, our system would not work in this configuration. We suspect the printer adapter hardware continued to trigger IRQ 7, confusing both the sound adapter and the printer. Changing the sound adapter's IRQ level to another unused address resolved the problem. ♦

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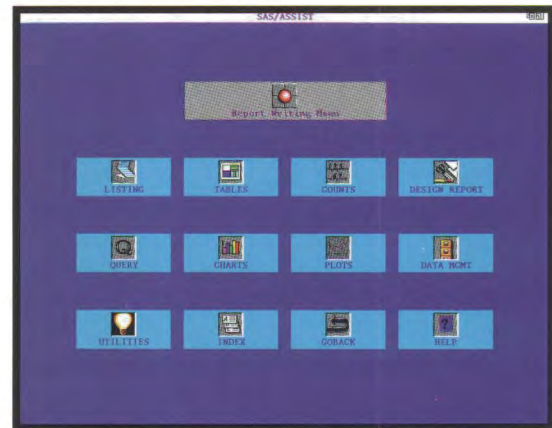
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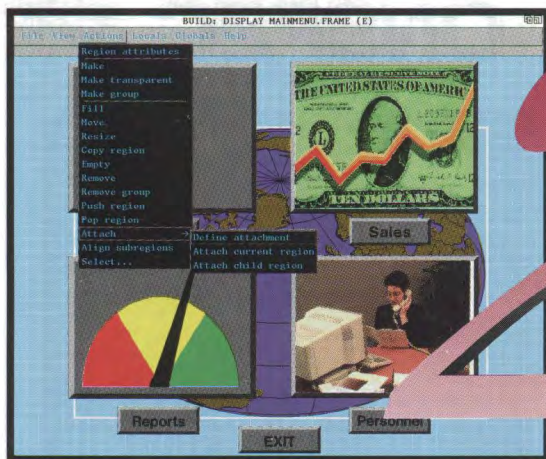
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A LAUNCH

BY EDWIN BLACK

I want to believe. So do we all. But our faith has been sorely tested. Most of us who watch and care about OS/2 agree that IBM has finally made the Everyman OS, the one worthy of universal adoption: OS/2 Warp. It wasn't even targeted at the OS/2 market. It's a Windows product. But even that was impressive. So most true Blue users put aside their self-interest and said, "Yes, we'll wait six months for our upgrade if it means that OS/2 can proliferate through the mass market."

The deep fear gripping the OS/2 community and Big Blue itself was that IBM would somehow muff the delivery and presentation of this superb product. But we were reassured with reports of a \$25 million advertising campaign as part of a nearly \$50 million launch budget. We were comforted by stories of an IBM War Room created by a dedicated band of IBM press affairs people, determined to spread the good news of Warp wherever ink ran and air waved. We were encouraged by the creative upgrade from Lintas to Ogilvy & Mather advertising and all the Microsoft and brand name product experience O&M would bring. And we were dazzled with the plans for a global launch that was strictly show biz.

Dreams and Nightmares

When the party began on October 12, it was so exciting, so exhilarating, so promising, that we all began to dream. But there is a time to dream and there is a time to wake up. IBM and the OS/2 community woke up to a marketing nightmare.

Most people know what happened. The prestigious *New York Times* ran a "review" of Warp written by Bill Gates' personal biographer. No, that isn't a joke. Stephen Manes, the author of *Gates*, actually wrote the *Times* review of Warp and—you guessed it—found Warp useless.

But then *PC Week's* Peter Coffee, last year's winner of the OS/2 Professional Media Award for responsible coverage of OS/2, found Warp to be very troublesome, citing installation problems among other things. Coffee's criticisms were echoed elsewhere. In fact, OS/2 Professional Editor Brad Kliever was about to write

his own negative review citing installation problems when it was discovered by all that a minor installation bug had not been corrected prior to manufacture. IBM explained that the bug just "somehow slipped by."

Soon, it was clear that the bug had been caught before most channels received product—but not before flawed NFS (Not For Sale) copies went to key segments of the media.

In short, many within the opinion-molding establishment were working with a defective copy of the product. Moreover, when the *Boston Globe* reported that IBM had "halted production" (yeah, for all of ten minutes) because of the bug, IBM marketing felt like it had been sent to PR hell. It could have been worse only if IBM had unknowingly sent out defective copies to every major reviewer in the country—wait, that's exactly what happened!

Blindsided

The PSP media relations corps didn't give up and run. They immediately switched gears from publicity hawking to crisis management—something they never expected. People in Austin and New York have described those days as "gut-wrenching," a "nightmare," and a "terrible experience."

It would be easy to kick them while they are down and talk about IBM bluefoony, a circus of mistakes, and business as usual at IBM. But try to see it from the point of view of IBM and the human beings involved. After laboring to do the right thing by so many in the media, after spending the time and money, they were slaughtered by bad luck and a significant dose of unfair media treatment. Under the circumstances, IBM staffers held up pretty well.

First, PSP General Manager Lee Reiswig (his title changes monthly) and Assistant General Manager Dan Lautenbach made the tough call to stop the presses and fix the bug. In so doing, Warp lost four to seven precious days in the channel pipeline. They also elected to go public with the bug swat. IBM claims just a few percent of users would have encountered a problem—those with config.bak in their systems. Informed sources at IBM indi-

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database management searching features with Version 03040 EDI Standard for
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Basic Requirements: OS/2 2.1 & DB2/2 Single User or C/S software are required.



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INFO-NET
TECHNOLOGY, INC.

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Tel: 714 753-7868 Fax: 714 753-7877
Circle #229

ANALYSIS

cate that one option was to tough it out and go for 90 percent-plus satisfaction and stay on schedule. But instead they did the right thing.

No one lauded the company for being able to fix an error and resume production virtually overnight—even at the cost of those four to seven market days. No one admired the company for its honesty in 'fessing up. Instead, people just mocked IBM and continued the dump job.

Now, I'm no IBM apologist. IBM is one of the most unfair and untrustworthy companies I have ever encountered. But I will stand up for it here because too many good people got the short end of the marketing stick—and OS/2 suffered.

Can anyone justify the *New York Times* running a review by a Gates biographer and known Windows bigot? Why not have David Barnes review Windows 95 (sorry David, I know you'd do a fair and balanced job)? Can anyone justify the *Boston Globe* claiming production was "halted" when the truth was a mere pause for a slipstream disk substitution?

'Grim News ...'

Bad press just seemed to mushroom, and even a reviewer for generally sympathetic *Business Week* wrote, "I really wanted to like Warp. ... Alas, Warp is a major disappointment," adding, "grim news for Warp. Without the promise of new and better programs, consumers have no reason to switch...." It became just too easy to bash IBM and put OS/2 down. Some reporters even resisted attempts to be helped with questions and requests.

No wonder that when IBM fixed the product, Austin ignored every media request for corrected shrinkwrap, including *OS/2 Professional's* request. Every available box was shipped to the channels for consumer purchase. IBM PR staunchly denies they did so, but certainly who would blame them if they had decided they had had enough of "fair and balanced" media coverage, and it was time to put the ball in the court of public opinion.

Warp print ads began hitting the business magazines and major newspapers, such as *Fortune* and the *New York Times*. And a group of 30-second spots began popping up all over television, from NBC's *Today Show* to Fox Network's weirdo UFO-centric *Sightings*. I still can't figure out if those geeky Warp TV ads are a big waste of time or profoundly effective. I just know they don't sway me like those lovable Apple ads or even the wondrous Microsoft ads now running. But who can argue with the results?

Demand for "Worf"

The stores can't keep Warp on the shelf. Even the Rockville CompUSA across the street from our office, my candidate for the

ANALYSIS

worst CompUSA in the nation, had to dust off unsold copies of OS/2 for Windows with an upgrade coupon to satisfy Warp demand. To quote one salesperson, "Worf[sic] is back there if it's still back there." Reorders from the likes of Egghead and Software Etc. have been escalating. The box is hot!

IBM manufacturing is cranking product out around the clock. Numbers are hard to come by, but IBM higher ups are talking about Warp doubling the Ferengi numbers. IBM sources say Warp in November was moving at the rate of 100,000 per week and by the time this appears in early December and UK shelves are stocked, a figure of 500,000 will not be out of line.

And remember, little of that 500,000 copies is updating Borg machines. Warp is a product for Windows users. The informed sense is that the mad November rush is mainly from the installed Ferengi base and those sites managed by Borg users who are now migrating OS/2 to their Windows systems. How many Windows users are being attracted from completely outside the OS/2 sphere is unknown, although *OS/2 Professional* is planning a survey of 1,000 Warp purchasers to determine why they bought and what their OS/2 experience was.

The Tide is Turning

Fortunately, as this is being written on the first Monday after Comdex, the tide is turning. Favorable press has appeared in *Infoworld* and *PC Week* and on the *NBC Nightly News*. Intelligent reviews based on a non-buggy product are starting to proliferate.

But the cost was high for PSP media relations and marketing. Fighting fires day and night overwhelmed Austin's extremely limited media relations staff.

Their job was made all the tougher by a management ruling several months earlier forbidding IBM staffers outside the media department from helping their traditional contacts in the press. Many of those contacts continued in secret as IBM staffers sneaked around their own management to answer reporters' questions that PR should have been answering. Moreover, three public relations staffers either resigned or transferred out in a single week during the launch. That made the funnel even narrower.

As an example of just how overwhelmed PSP PR was, despite its claim that its hotline is ready to respond to any media question, PSP PR in fact did not respond to 28 inquiries from *OS/2 Professional* (although they did answer several other pressing questions after the installation problem). Numerous promises to get back to us by deadline were broken and when info did come in, it was too late. And our response was not unusual among the press.

Help Desk Software Comes of Age . . .

HODstar Supporter provides your support staff a platform to track network resources and customer/employee calls.

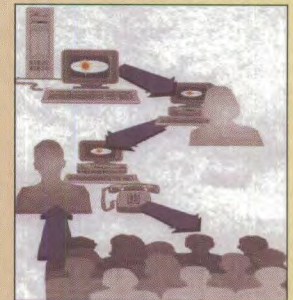
These two functions are indispensable when integrated into a single facility.

HODstar Supporter is this single facility.

Your administrators determine what server information goes into HODstar Supporter's profiles. Help desk staff then use those profiles to support your end-users.

Profile data can be stored anywhere on your DB2 network! Or use our database!

Profiles can be loaded individually, or automatically using a separate loader module.



- Client/Server for wide-area-network tracking - no network too large or too small!
- Transparent data access using IBM's multiplatform DB2 engine means support from OS/2 and NTAS desktop PC's to UNIX and mainframes! Or use our database!
- Extremely fast 32-bit implementation, and nothing but data goes over your network!
- Instantly view full profile for all network resources relating to a customer call, from printers and drives to different network types!
- Permits network administrators to show support staff the right levels of information!
- Automatic call alarming!
- Unique, self-updating queues to group your calls!
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- On-line tutorial, documentation, and contextual help makes your staff productive immediately!

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Available through OS/2 EXPRESS

Circle #259
December 1994 OS/2 Professional 31

ANALYSIS

Let's talk about the real world results of that failure to respond at least to our magazine's coverage. *OS/2 Professional* had to move a major story on LAN Server from December to March; we were unable to get confirmation on a half dozen rumors; we were unable to get some positive information about Ad Manager Joanne Meleski, something people in Austin maintained we were overlooking; we were unable to receive a fax of an open letter from John Soyering about the installation bug until a week after it circulated; we were unable to get a promised copy of Lee Reiswig's rebuttal letter to the *New York Times*; and despite nine requests, we were unable to get a videotape of all Warp spots until after our deadline (last time when we asked for the four Fiesta bowl commercials, the tape was shipped overnight).

I'm not trying to criticize people for not calling us back. No one is questioning the skill or competence of Austin PR. I know that every time we called, we spoke to very gracious, hard-working people anxious to do their jobs efficiently. But they were simply overwhelmed. Under the circumstances, it could only be called PR triage. And this is exactly the point I made in our October cover story and I am making again. IBM PR is undermanned. If they get into trouble, they are overwhelmed. If they succeed, they are still overwhelmed. It's no secret. They know it. You know it.

Bouncing Back

But even now, IBM marketing is bouncing back. Several hundred bugless media copies of Warp—packaged in gigantic, attention getting containers emblazoned “We took great Panes to be with you for the Holidays,” complete with videos and T-shirts—have hit the newsrooms. As I unwrapped mine, *OS/2 Professional* Executive Editor Alan Kay saw the sparkle in my eye and said, “I can see the wheels in your mind turning and your attitude changing to a more positive one.” Well, yes, any sign of life at PSP is a reason to celebrate.

And today, the Monday after Comdex, every marketing staffer responded to every call and provided every bit of information we needed to pick up the pace. That too is a big comeback for a small marketing and PR staff that just weathered a major storm and is coming back at Warp speed. So the bottom line is that I am still confident that the Warp campaign will succeed. But it won't be easy. The people in Austin know that. And right now, they could use a little more support.

So that's what I'm giving them—at least until next month. ♦



For additional information about an advertised product or service, circle the number. When you circle a number, you not only gain access to valuable information, you demonstrate to the advertisers that their support for *OS/2 Professional* gains them an important visibility in the OS/2 market. To subscribe, check the subscription box, and fill out the qualifying information required to fulfill all subscription requests.

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OUR PRICE: \$10.00
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*prices and availability subject to change without notice. Specify "A" for CD-ROM, "B" for 3.5" diskettes.

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Error Manager 2.0: \$49.00
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LIMITED STOCK—THEN THEY'RE GONE!

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Warp Speed Light Pens	\$50.00	210



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Regular Express price: \$72.00
HOLIDAY BUNDLE PRICE: \$59.95

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Regular Express price: \$123.00
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Sim City
OS/2 Pro CD-ROM
Regular Express price: \$76.50
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◆ OS/2

OS/2 WARP Version 3

IBM

Take off at warp speed with IBM's latest upgrade to OS/2, WARP. Everything runs faster and in less memory with WARP's optimized code. Improved device support and one-button install will let you hit the ground running. New drag and drop functions and window management routines require less work on your part, further enhancing your productivity. Backward compatibility with previous versions gives you everything you loved about 2.1 and adds those long-desired features you've requested, including a Bonus Pak with enough true 32 bit applications to run a small office.

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WinGrate

DK Micro

Tired of waiting for the Full Pack version of Warp to arrive? WinGrate migrates your WIN-OS/2 environment to a format compatible with Microsoft Windows and prepares your system for Warp installation. All you need to upgrade OS/2 2.1 (Borg) are copies of OS/2 Warp version 3, Microsoft Windows 3.1 or 3.11, and WinGrate.

Order Number 309 *MSR: \$20.00*
OUR PRICE: \$10.00
WARP ADD-ON \$5.00

*prices and availability subject to change without notice. Specify "A" for CD-ROM, "B" for 3.5" diskettes.

◆ BACKUP

Back Again/2-Pro

Computer Data Strategies
Back Again/2-Pro is a graphical 32-bit backup program for OS/2. It supports backup to LANs, SCSI tape, and other removable media. Includes compression, backup scheduling, and command line utilities for complete disaster recovery.

Order number 236 *MSR: \$149.00*
OUR PRICE: \$95.00



Back in a Flash!

CCT

Schedules incremental or comprehensive backup to diskette, Bernoulli, LAN drives or Optical. Support unavailable.

Order number 290 *MSR: \$49.00*
CLOSEOUT PRICE: \$20.00

BakupWiz

PCX

BakupWiz is the OS/2 solution for backup to SCSI tape, Bernoulli, syquest, magneto optical, and tape auto-changers. Full support for EAs, long names, and networking is included. Your OS/2 system partition can be completely restored.

Order number 171 *MSR: \$149.00*
OUR PRICE: \$95.00

Cheyenne ARCSolo for OS/2

Cheyenne Software, Inc.

ARCSolo is the first substantial native OS/2 backup solution. Designed with a WPS-like front end, it offers drag-and-drop functionality, multithreading, and an object oriented approach.

Order number 240 *MSR: \$295.00*
OUR PRICE: \$225.00

NovaBack for OS/2

NovaStor

NovaBack for OS/2 is a complete backup solution for all OS/2 workstations or networks. Support for OS/2 1.x and 2.x is shipped together. NovaBack supports more than 250 SCSI and QIC-80 tape drives.

Order number 138 *MSR: \$79.00*
OUR PRICE: \$49.99

Nutshell

Quantum Micro Systems

Nutshell for OS/2 is a quick and easy backup, restore, and re-install solution for all LAN, tapedrive, and laptop environments, including Novell 3.12, and LapLink.

Order number 200 *MSR: \$85.00*
OUR PRICE: \$62.50

◆ UTILITIES

ATS for OS/2

MHR

Advanced Task Scheduler for OS/2 is a production job scheduling utility that eliminates the need for human intervention during routine batch processing. ATS allows you to take complete control over how and when each of your scheduled programs will run.

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"Bloodhound"

IBM

"Bloodhound" (aka SearchManager/2) is probably the most powerful text finding tool you can buy for a PC. Once you've indexed your files, this native 32 bit OS/2 utility and its Thesaurus will find and retrieve with lightning speed files in five languages containing the words you're looking for and linguistic variations and synonyms.

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OUR PRICE: \$225.00

LAN version add-on

Runs on LAN Server, Novell or IBM TCP/IP.

Order number 285
OUR PRICE: \$225.00

Chron

Hilbert

Chron is an OS/2 PM application that will schedule other OS/2, DOS, or Windows applications to run at a specified time and a specified frequency.

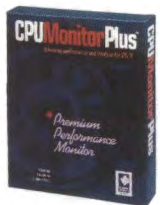
Order number 184 *MSR: \$99.00*
OUR PRICE: \$89.00

CPU Monitor Plus

Bon Ami Software Corp.

A premium performance and analysis package for OS/2. CPU Monitor Plus permits real time monitoring and control of CPU, RAM, disks and ports, and program and thread control for all OS/2, DOS, and Windows programs.

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CursorPower

North Shore Systems

Redesign and resize arrow, wait, I-beam, and other cursors. Create new cursors or turn graphics, text, signatures, and company logos into cursors. Toolkit includes OS/2 and Windows versions on one disk.

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DeScribe - Lights

DeScribe Inc.

A unique, unobtrusive CPU activity monitoring tool. Takes up only one pixel of screen space at the bottom of the OS/2 screen. Acts as a thermometer of CPU activity identifying CPU overload, hung systems and other multitasking activity.

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DeskMan/2 v 1.5

Development Technologies

The essential Workplace Shell utilities.

Dramatically improves the ability of corporations and users to get the most out of OS/2. Manage, secure, backup, and migrate the WPS; get organized with virtual desktops; more.

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Encrypt your most precious corporate asset—your company data! Using the latest data encryption techniques available*, GammaTech File Secure protects sensitive data from unauthorized viewing. Files are encrypted using unique file keys that cannot be replicated. Data can be obliterated using techniques that conform to U.S. Department of Defense 5220.22-M specifications. (*This product's use of Data Encryption Standard algorithms means its sale, resale, or use outside the U.S. and Canada is expressly prohibited).

Order number 111 *MSR: \$39.95*

OUR PRICE: \$34.95

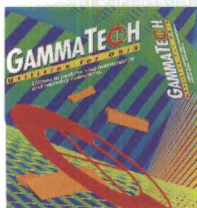
GammaTech Power Pack for OS/2

SofTouch Systems, Inc.

Power Pack is a PM-based application which launches applications and executes lengthy keystroke operations with a couple of function keys. It also includes a sophisticated editor to create, delete, or modify OS/2 INI files and the Extended Attributes associated with your data files. Supports both ASCII and hex. Enhanced screen saver with "hot" corners included with this offer.

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GammaTech Utilities for OS/2

SofTouch Systems
GammaTech Utilities for OS/2 makes it possible to perform HPFS volume recovery, FAT and HPFS optimization, and essential maintenance

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J&J Utilities for OS/2

J&J Computer Consulting

J&J Utilities v 1.5 is a collection of over 20 utilities including file locate, HPFS and FAT file defragmenters, process control automatic job scheduling, and more.

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IBM AntiVirus/2

ISSC

IBM AntiVirus/2 uses new "neural network technology" developed by IBM Research scientists to detect previously unknown boot viruses and "learn" how to identify infected and uninfected sections of software, thus significantly reducing false alarms.

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LinkRight 1.1

Rightware Inc.

This parallel/serial port file transfer utility package for OS/2 includes three versions: Presentation Manager, OS/2 command line, and DOS. Copy files to/from OS/2 and to/from DOS systems retaining EAs and long file names. Compatible with LapLink cables.

Order number 113

MSR (with cables): \$189.00

OUR PRICE (W/CABLES): \$99.00

Order number 114

MSR (without cables): \$110.00

OUR PRICE (W/O CABLES): \$65.00

MESA 2

Athena Design

At last, an important new native OS/2 spreadsheet which takes advantage of SOM, OpenDoc, multithreading and Object Oriented User Interface. Also includes an object library so that you can integrate MESA objects into your own line-of-business applications.

Order number 310 *MSR: \$199.00*

SPECIAL PRICE THROUGH 1/15/95: \$98.00

OS2Tree Lite

Levine

OS2TREE Lite is what XTREE Gold is to DOS, what Norton Commander missed, and more. Dynamic graphic file management for OS/2 supporting both FAT and HPFS.

Order number 141 *MSR: \$125.00*

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OS2Tree Pro

Levine

All the features of OS2TREE Lite plus LAN drive, mainframe file upload/download support, and one year of upgrades and product support.

Order number 142 *MSR: \$250.00*

CLOSEOUT PRICE: \$89.00

Performance Plus for 2.1

Clear & Simple, Inc.

Optimize your system with the help of this collection of 25 OS/2 REXX Workplace Shell utilities plus a 100-page manual on finetuning OS/2 2.1. Also includes a bonus pack of 3,000+ OS/2 format icons.

Order number 115 *MSR: \$39.95*

CLOSEOUT PRICE: \$15.00



Performance Plus for Warp

Clear & Simple

Performance

Plus is a system tuning and utility kit for OS/2 Warp. Features a new simple GUI, DOS/Windows application optimizer, bitmap viewer, swap monitor with audible warning, and more. Plus bonus OS/2 bitmaps.

Order number 311 *MSR: \$39.95*

OUR PRICE: \$27.00

Pegasus Resource Monitor

OnDemand Software & Services

The first affordable, professional performance monitor of OS/2 version 2.x. Features: statistical data logging, pop up, exceptions, and a real time graphical display.

Order number 168 *MSR: \$149.00*

OUR PRICE: \$99.00

Priority Master II

ScheduPerformance, Inc.

Designed for OS/2 developers, Priority Master II adds to Priority Master I additional auto priority scanning logic. Take control of your development environment and how your programs co-exist.

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CLOSEOUT PRICE: \$4.00

PrntScrn

MITNOR Software

4 Integrated Utilities—1 Low Price! Copy any portion of any desktop image; import, export, view, print clipboard images and text; nine screen saver displays; date/time display. LAN installable; includes OS/2 2.x and 1.3 versions.

Order number 154 *MSR: \$115.00*

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PM Assistant

Utilis, Inc.

A comprehensive and integrated suite of utilities including: hot-key access to applications, automatic application placement on screen, keyboard macros, task scheduling, screen saver, and password protection.

Order number 183 *MSR price: \$129.00*

OUR PRICE: \$99.00

QuikSwitch for OS/2

BitWare Consulting

Increase productivity by starting and switching between frequently used programs quickly by pressing key combinations (hot-keys). Works for DOS, Windows, and OS/2 applications. Speech-enabled, works with IBM's ICSS speech recognition software and most sound cards.

Order number 180 *MSR: \$39.95*

OUR PRICE: \$29.95

System Sounds for OS/2

BOCASoft

System Sounds gives your computer a voice by associating audio with system events and keystrokes. Includes over one megabyte of professionally recorded sound effects in Microsoft audio format. Requires an audio card supported by MMPM/2 (included with OS/2 2.1).

Order number 252 *MSR: \$59.00*

OUR PRICE: \$46.00

Secure Workplace for OS/2

Syntegration

The Secure Workplace for OS/2 is a collection of workplace objects and program utilities designed to provide workplace shell protection, setup, and support.

Order number 165 *MSR: \$59.95*

OUR PRICE: \$49.95

10-Station Enterprise Edition:

Order number 166 *MSR: \$549.95*

OUR PRICE: \$459.95

SuperType Master Library

IQ Engineering

SuperType Master Library contains 96 scalable, professionally-designed, display, text and headline fonts to add style and creativity to all your applications in OS/2.

Order number 205 *MSR: \$29.95*

OUR PRICE: \$24.95

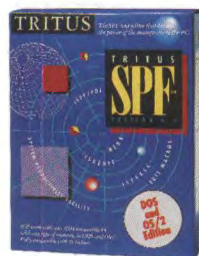
Tritus SPF

Tritus

Tritus SPF is a 32 bit ISPF/PDF text editor for OS/2. Includes mappable keyboard, unlimited UNDO/ REDO, REXX macros, EBC-DIC support, Micro Focus workbench integration, modifiable panels, cut/paste, text search, and DOS support. Edits files up to 256mb.

Order number 167 *MSR: \$195.00*

CLOSEOUT PRICE: \$29.00



UniBeam

Binary Software Development

UniBeam is an OS/2 and DOS/Windows File Transfer Utility with an up to 2 mbps transfer rate over parallel cable. It's extremely easy to install and use. Native OS/2 code supports Presentation Manager, extended attributes, long file names and 32 bit I/O. Includes both a parallel and serial cable.

Order number 239 *MSR: \$189.95*

OUR PRICE: \$179.95

WipeOut

BOCASoft, Inc.

Wipeout is a 32 bit screen saver for OS/2 featuring animated displays and video screen savers, integrated with multimedia audio, password protection, screen capture, and priority manager

Order number 245 *MSR: \$59.00*

OUR PRICE: \$42.00

XFolder

Rosenberry Consulting, Ltd.

XFolder arranges and aligns desktop and folder icons. Select row, column, or perimeter layouts. Position all icons or selected icons. Multiple levels of "Undo". Save and restore favorite layouts. Customize icon spacing.

Order number 292 *MSR \$49.95*

**INTRODUCTORY PRICE: \$19.95
(AFTER 1/15/95: \$29.95)**

NEW!

ZipStream for OS/2 2.1

Carbon Based Software

ZipStream is an OS/2 Installable File System (IFS) that mirrors access to existing OS/2 File Systems, and simultaneously provides automatic transparent file compression and decompression services.

Order number 295 *MSR: \$79.95*

OUR PRICE: \$68.00

NEW!

CD-ROM

OS/2 Professional CD-ROM

More than 1,200 OS/2 shareware, freeware, demoware programs, tools, and scores of OS/2 resources.

Order number 163

OUR PRICE: \$25.00



COMMUNICATIONS

Communications Manager/2 v 1.1

IBM

Comprehensive communications processor includes improved 3270 and 5250 terminal emulation, more APPC functions plus features such as Data Compression and Distributed Feature Workstation.

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Easy to use OS/2 to Mainframe connectivity with drag and drop file transfer and paste linking of host and PC applications. Interface support for MS SNA Server, APPC and CPI-C 2.0, Novell Netware for SAA and TCP/IP.

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SofNet, Inc.

Faxing from any OS/2, Windows, or DOS application via a Class 1, Class 2, or CAS fax modem. The software also includes annotation tools to allow electronic markups, fax broadcasting, and multiple channel options.

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10-user LAN version

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Award-winning FaxWorks Pro for Windows features advanced viewing clarity, extensive fax management tools, fax annotation, a cover sheet creator, modem diagnostics, letterhead merge, and more importantly, it's easy to use.

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Permits users to quickly and easily send messages to today's standard pagers. Also creates standalone programs to add pager functionality to any OS/2 batch file, REXX program, and commercial application. Supports all AT-compatible modems. Also available in site-wide and 'unlimited use' license.

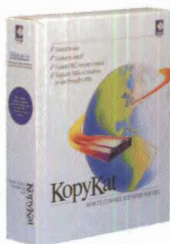
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Full-featured OS/2 tele-communications and terminal emulation package; supports ANSI, VT100, IBM3101, and TTY emulations, and most common file transfer protocols.

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Globalink, Inc.

This powerful application provides idiomatically accurate full-sentence foreign language translations under OS/2. Get the most accurate translations available to computer users today, with subject-, industry-, or profession-specific dictionaries. Versions are available translating to and from Spanish, French, or German.

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Order number 116B—French

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Binar Graphics, Inc.

Realize the full power of OS/2 with SkyScraper. This application gives you practically unlimited screen real estate. Virtual desktops at a single click; all your applications run maximized on their own desktops! Launchpad and many other features.

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BT&T Consumer Technology

Calculate your 1994 income tax return and prepare for official tax forms. Includes 1040, Schedules A, B, D, E, C, 8829, SE, 2441, EIC, R and "What If" calculations. Links with "Final Forms," available in January.

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This includes the final versions of all the IRS forms needed to file complete 1994 tax returns. Companion system to Tax Dollars '94 planning version. Available in January.

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Time & Place 2

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This LAN-based calendar displays daily, weekly or monthly calendars. It also features windows in which meetings can be scheduled, room or equipment reservations made, free time searched, priorities assigned, and due dates set. A memo function also allows you to relay event-specific messages between worksessions.

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Diacoustics

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One 32 bit illustration package does it all: CorelDRAW!, CorelCHART, and CorelPHOTO-PAINT in one box, all optimized for OS/2. Plus a bonus CD-ROM with more than 12,000 clip art images and 250 fonts.



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Includes CSet++, Experience CSet++, and OS/2 for Windows

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C/C++ 10.0, CD-ROM Edition (CD-ROM with on-line documentation)

Watcom

Professional C and C++ development environment for 16 and 32 bit DOS, Windows, OS/2, Windows NT, and Novell NLMS. Includes a comprehensive toolset with an IDE, debugger, C++ class browser, MFC support, and more.

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CA-Realizer is the ultimate BASIC construction set for Windows and OS/2. The same CA-Realizer BASIC code that creates a Windows application ports instantly to OS/2.

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Nombas

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Error Manager 2.0

Soft & GUI Corporation

Error Manager is an OS/2 2.x development tool kit that provides unique testing and debugging facilities. It eliminates the need to check API Return codes, and no symbol information is required.

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GammaTech REXX SuperSet/2 for OS/2

SuperSet/2 contains over 308 functions in 7 DLLs; extensions include support for EHLLAPI, LAN Server, NetBios, TCP/IP, and miscellaneous host utilities. It simplifies your life by eliminating the need to maintain poorly documented DLLs from disparate sources. 650-page reference manual included.

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GpfRexx

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A WYSIWYG OS/2 PM visual programming tool that uses REXX. Point and click to create basic or advanced applications using OS/2's capabilities. No royalties will be owed; configurable run-time capability.

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Perez Computing Services

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IPF Builder

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KASE Systems

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Autumn Hill Software

MENUET/CSX is a C++ application framework for OS/2, WINDOWS and DOS. MENUET/CX was designed and developed under OS/2.

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Percussion Software

Notrix uses REXX to build Lotus Notes event-driven, server add-in applications. Manipulate Notes data WITH NO Notes API or C programming.

Application Developer's Kit:

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Notrix Server Kit:

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Object Factory-IDL, Version 2.0

Synaptec, Inc.

The first OS/2 SOM tool continues to expand SOM development with the introduction of version 2.0. This feature-packed upgrade forges new ground in state-of-the-art OOUI interfaces, allowing the fastest possible SOM development.

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OS/2 UCSD Pascal Development System

Cabot Software

The UCSD Pascal 32 bit professional development system is for Turbo Pascal users who want TP compatibility, a full 32 bit Pascal compiler, and links into OS/2's API technology. Key benefits include: UCSD Pascal links into the OS/2 API technology; Turbo Pascal compatibility; production of portable programming code; and value for money product, with a full range of programmers toolboxes.

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Objectpm

Raleigh Systems, Inc.

The first class library geared specifically for OS/2 and the Presentation Manager,

Objectpm provides more than 200 classes of objects encapsulating windows, controls, graphics tools, forms, threads, and much more. Supports Borland C++ for OS/2 and IBM CSet++.

C Set++ Version with Source

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Borland Version with Source

Order number 119B *MSR: \$399.00*
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Borland Version without Source

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REXX Diagnostic Commander

Suitable Alternatives

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RexxTools for OS/2

Innovative Business Technologies, Inc.

Toolkit of two REXX development tools. RexxPack compresses a REXX command file. RexxComp creates an OS/2 exe from a REXX command file providing secure code.

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Rexx VIM: The VIM Toolkit for REXX

Innovative Business Technologies, Inc.

Allows REXX to access cc:Mail and Lotus Notes for message creation, addressbook activities, inbox automation, and other e-mail activities. Full VIM capabilities from within REXX.

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Source Safe

One Tree Software

SourceSafe coordinates developers on a LAN, and tracks versions of source code modules and entire projects. And SourceSafe's PM and commandline interfaces provide easy access to your entire development system.

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Synaptec, Inc.

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Command Technology

SPF/PC is a powerful file manager and full-screen text editor that emulates IBM's mainframe ISPF/PDF, providing a familiar environment for mainframe programmers who are faced with the challenge of developing on a PC.

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Hockware

VisPro/REXX takes the power of OS/2, Workplace Shell, and the REXX language and harnesses them into an easy-to-use visual programming environment.

VisPro/REXX, Bronze Edition

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OUR PRICE: \$89.00

VisPro/REXX, Gold Edition

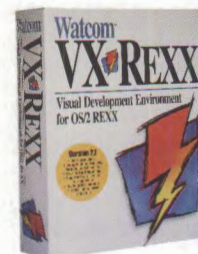
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VisualAge

IBM

Client/server application development takes on new power with Visual Age, which includes visual programming tools, a library of reusable parts, distributed database support, and graphical user interface support. Includes IBM Smalltalk object oriented programming environment.

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VX•REXX for OS/2

Watcom

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Watcom VX-REXX Client/Server Edition Version 2.1

Watcom

A visual development environment for OS/2. Powerful connection, query, and chart objects allow you to access several databases, manipulate data and chart results quickly and easily. Features include drag-and-drop programming; bound controls; professional multithreaded, multi-windowed and drag and drop enabled application development.

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IBM

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DB2/2 3.5" diskette

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DB2/2, Client Server 3.5" diskette

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HODstar™ Support Solutions

Expands upon the Monitor product by adding call tracking. Features automatic call alarming, self-updating call queues, and support for HODstar Pager. Also available in single-user, site-wide, and 'unlimited use' license.

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A native 32-bit PM implementation of the popular Xbase language. OnCmd also offers an upward migration of DOS and Windows Xbase applications into OS/2 with implicit multi-user and GUI support

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Watcom

Watcom SQL for OS/2 is a high performance standalone SQL client/server DBMS for OS/2. Watcom SQL for OS/2 includes a variety of interfaces to access Watcom SQL from many popular OS/2, DOS, and Windows applications including embedded SQL application development with popular C/C++ compilers.

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Pinnacle Technology, Inc.

Remotely configure and password-protect desktops. Prevent deletes, copies, moves, dragging, shadows, or renames, or hide objects from view. Launch your own C or REXX routines on any network client, based on event.

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HODstar Support Services

Provide your employees with a quick and convenient way to keep up-to-date with your company's activities! Employees can browse current and older messages, cut and paste critical information such as phone numbers and schedules to their own applications, or print and save individual messages. Also available in 'unlimited-use' license. Uses the same database as all HODstar products.

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HODstar's base-line product, Monitor provides your support staff complete profiles and assignments for all resources on any network without giving users access to the actual servers. Also available in single-user license, site-wide, or 'unlimited use' license.

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Artisoft, Inc.

LANtastic for OS/2 brings easy to use networking and peer-to-peer sharing to the OS/2 platform.

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LAN Server 4.0

IBM

LAN Server is easy to use and easy to grow, making it the best network operating system for small and medium sized businesses as well as large and corporate installations. Supports OS/2, Windows, and Macintosh, as well as most Ethernet and Token Ring adapters. Lan Server 4.0—Entry, CD-ROM

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Lan Server 4.0—Advanced, CD-ROM

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Lan Server 4.0—Advanced, 3.5" diskette

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LAN Server Upgrades

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NEW!

NEW!

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TCP/IP v2.0

IBM

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TCP/2-OS/2 Distribution System

Essex Systems, Inc.

This product provides TCP/IP connectivity for OS/2. It supports all released versions of OS/2 and NDIS, CM, and ODI drivers. TCP/2 provides network access from protected, real, and WIN-OS2 sessions, and offers IP Gateway capability.

Order number 125 MSR: \$475.00

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IMAGING

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Cirrus

UniteLite is a workplace shell enabled imaging product for OS/2 2.1 and WARP.

Advanced, yet easy-to-use features: scan, view, organize folders and print.

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RAID SOFTWARE

EZRAID for OS/2

PRO Engineering, Inc.

This software RAID solution supports RAID Levels 0, 1, 4, and 5. It works with SCSI, ESDI, and IDE disk interfaces and includes powerful array management tools.

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MANUFACTURING

ONSPEC 32

ONSPEC Automation Solutions

Advanced supervisory control and monitoring solution designed to work in a lab or with plant-floor automation systems to provide real-time data acquisition, control, alarming and trending. Native 32 bit micro version takes full advantage of OS/2 power.

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DESKTOP MAPPING

Spans Map

TYDAC Technologies Inc.

SPANS MAP is a comprehensive desktop mapping software package for the visualization and querying of geographically-referenced data. It imports standard data formats including dBASE, Lotus and SPANS, and allows the user to view data in five simultaneous formats: digital map, chart, spreadsheet, image, and text.

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HARDWARE

Warp Speed Light Pens

Warp Speed Light Pens, Inc.

The new Warp Speed Light

Pen runs OS/2 fast. No more...

"cursor, cursor where's the cursor?" Just touch and go, double click, drag and drop, fast and easy. The Warp Speed Light Pen frees up 100 square inches of desk space. The first 100 orders will receive a free T-Shirt: "I got 100 free inches!"

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With ISA Adapter card:

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Order number 210A

With MCA Adapter card:

MSR: \$199.00

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BOOKS

Advanced OS/2 Presentation Manager Programming

Thomas E. Burge and Joseph Celi
(John Wiley & Sons)

Written by two IBM insiders, this definitive reference clearly explains OS/2 and its graphical user-interface, the Presentation Manager, and provides the reader with tips, tricks, and techniques in clear, concise C code.

Order number 237 MSR: \$34.95

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Application Development Using OS/2 REXX

Anthony Rudd
(John Wiley & Sons)

A concise and complete source of information necessary for developing applications using REXX in an OS/2 environment.

Complete examples, devoid of superfluous details, make even the most complex concepts clear and easy to understand.

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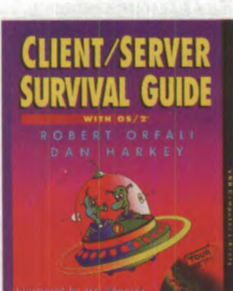


C and C++ Programming in the OS/2 Environment

by V. Mitra Gopaul
(Van Nostrand Reinhold)

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Client Server Survival Guide for OS/2

by Robert Orfali
and Dan Harkey

(Van Nostrand Reinhold)

Client/server is reinventing every aspect of computing from operating systems and communications to applica-

tion architectures. This book helps you separate the theory from reality.

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Designing OS/2 Applications

David E. Reich
(John Wiley & Sons)

The critical issue of basic OS/2 design applications are covered in full detail in this compre-

hensive book. OS/2 programmers will find coverage of programming and application design not documented anywhere else.

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Instant OS/2! Porting C Applications to OS/2

by Len Dorfman
(McGraw-Hill)

Instant OS/2! gives C programmers a way to create programs and interfaces for DOS and OS/2 using the exact same source code! With Len Dorfman's platform-tested techniques, software developers don't even have to know how to use OS/2, much less how to program for it.

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Mastering OS/2 REXX

Gabriel F. Gargiulo (John Wiley & Sons) Gargiulo applies his considerable technical and teaching talents in this book with rewarding results. Emphasizing real-world usage instead of theory, his approach guarantees a quick and absolute mastery of REXX programming.

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Maximizing OS/2 2.1

by John Little, Toby Pennycuff, Marlene Sample & Stephen Gutknecht
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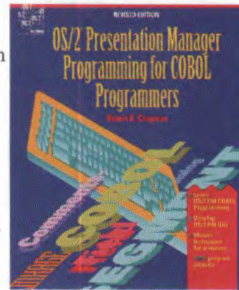
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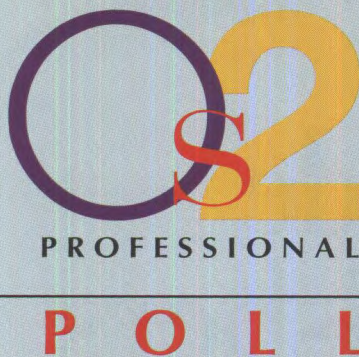
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Welcome back to the OS/2 Poll. This month, we're once again asking your opinions about the Warp launch. In fact, we're asking the *same questions* for three months, from October through December, to gauge the ups and downs of IBM's campaign. Even if you answered these questions in October and November, we'd like you again to fax this survey back to us at (301) 770-1720. We'll publish the results in a forthcoming issue. Thanks for participating.

SURVEY #4

We'd like to know your thoughts on pressing issues facing OS/2.

1. How much have you seen or heard about IBM's launch of OS/2 Warp Version 3?

- ☐ a great deal ☐ very little ☐ none (please move on to question #4)

2. Through which media have you seen or heard advertising about the new product?

(please check all that apply)

- ☐ TV ☐ Radio ☐ Newspaper ☐ Magazines
☐ Billboards ☐ Direct Mail ☐ Other (please specify) _____

3. So far, what has this advertising and publicity motivated you to do?

- ☐ Seek out more information ☐ Decide to buy it ☐ Nothing ☐ My decision to buy was made *before* seeing any advertising

4. What do you think of the name, "OS/2 Warp"?

- ☐ I love it! ☐ It's OK ☐ I hate it ☐ No opinion

5. What version of OS/2 are you currently using?

- ☐ Pre-1.3 ☐ 1.3 ☐ 2.0 ☐ 2.1/2.11 ☐ OS/2 for Windows

6. When do you plan to upgrade your OS/2 system to Warp?

- ☐ October '94 ☐ November '94 ☐ December '94 ☐ First half of 1995
☐ Second half of 1995 ☐ I won't make that decision until the release of Windows 95 ☐ I have no plans to upgrade to Warp

7. Which of the following features is the *most* important to you?

- ☐ One-button install ☐ Internet access ☐ IBM Works
☐ Reduced memory requirements ☐ None of these features is important to me

Please tell us about yourself:

Do you subscribe to OS/2 Professional?

- ☐ yes ☐ no

How many employees are in your company?

- ☐ 1-5 ☐ 6-10 ☐ 11-50 ☐ 51-100
☐ 101-500 ☐ 501-1000 ☐ 1000+

Title (check all that apply)

- ☐ Chairman, president, owner, partner ☐ VP, financial officer, treasurer, controller ☐ Manager, supervisor ☐ MIS/DP specialist
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☐ Programmer/programmer analyst ☐ Computer educator ☐ Professional
☐ Other (specify) _____

Which best describes your company? (check all that apply)

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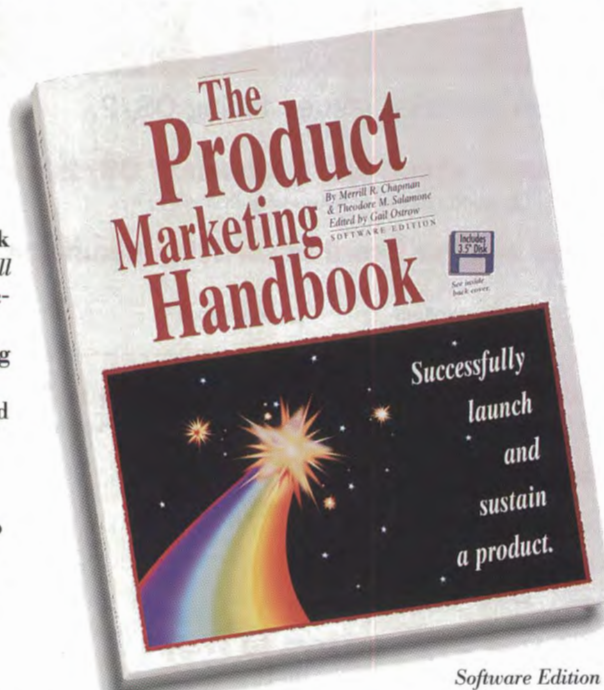
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About the author...

Merrill R. Chapman has been in the software industry for 15 years and has seen firsthand the brilliant marketing techniques employed by industry giants and the catastrophic errors made by companies that are no longer in business. He presently consults with and trains marketing professionals in companies that include IBM, DataEase, SUN, Berlitz and WordPerfect.

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OS/2: Guns and Butter

BY MICHAEL S. KOGAN

During the last year Eye on the Market has examined OS/2's role in a number of environments—home, SO/HO, and corporate business. We have explored OS/2's preemptive multitasking, multithreading, and memory protection, and why OS/2 is a natural for environments that walk and chew gum simultaneously.

But we haven't said much about OS/2's extendibility and flexibility—how well it can be customized and adapted to solve a wide variety of problems in diverse environments. That's an oversight I intend to remedy, since OS/2 was designed to be customizable, allowing developers to take OS/2 wherever they need it.

By way of illustration, let's take a look at two really cool OS/2 deployments—one an electronic distribution and manufacturing application, the other a real-time mission critical defense system.

When Supply Meets Demand

Fireworks Partners, a 1991 IBM effort to establish joint ventures to exploit IBM's technology, has borne fruit in the form of two companies, Fairway Technology and NewLeaf Entertainment. Both are jointly owned by IBM and Viacom/Blockbuster and are chartered to develop and market the electronic delivery, presentation, and manufacture of entertainment software products. Fairway develops the technology, while NewLeaf markets it and negotiates strategic alliances and licensing agreements.

Electronic distribution technologies potentially provide huge money savings, allowing the retailer to meet demand instantly, speeding distribution time for new titles, and virtually eliminating inventory stocking issues. However, on-demand distribution to the home is still many years away—the information highway does not yet have the bandwidth necessary for a robust home exploitation. And we're still awaiting those intelligent TV set-top boxes (actually, PCs in disguise). But in the meantime, the Fairway/NewLeaf duo is paving its own lane to deliver entertainment software electronically to retail stores.

The first system is Game Factory, being tested in Blockbuster

Video outlets in Columbia, South Carolina. The system is essentially an x86 PC connected to multiple game cartridge burning units, printers, preview kiosks, and other inventory and point-of-sale systems. As a first step, Game Factory can download Sega Genesis modules onto game cartridges on demand. These can be reprogrammed an unlimited number of times. Other popular game formats such as Super Nintendo and GameBoy are in the offing, assuming licensing issues can be worked out with the hardware vendors and the content providers.

Why use OS/2 to operate Game Factory? Simple: the archi-

tecture requires that the system concurrently be able to drive multiple cartridge burning devices, print game instructions in the background, communicate with the other store systems, and provide a reliable interactive environment that anyone can access without the dreaded Fear, Uncertainty, or Doubt. Fairway implemented OS/2 device drivers for the cartridge burners, and multithreaded applications to put the factory in operation. Security was added to protect the game content. All this is no sweat for OS/2.

Fairway/NewLeaf is also testing a music listening kiosk, a precursor to a future "CD Factory" system, in Block-

buster Music outlets in South Florida. Local systems at the retail outlet will be used to drive on-site CD manufacturing, and connect CD servers to provide the data on demand over an ATM-based WAN. Once again, no surprise this is a job for OS/2.

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that communicates with other radar and data collection sites via a high speed serial network. During an exercise, radar sites are classified as either masters or slaves. When acting as a master, a radar site must measure target location and transmit that data to slave radar sites. The slaves receive information and commands from masters over the network, process the information, and point their radars where the target is supposed to be.

PCs at all the radar sites must also collect data from their radars using analog-to-digital devices, package the readings, and send them on the network. They also must log their data locally to slow magneto-optical drives and interact with the console operator. Moreover, to ensure accurate logging and timekeeping, all sites are slaved to a global time source coming from a GPS satellite.

Is Eglin's distributed real time control and acquisition system mission-critical enough for you? Any latencies can result in a radar site missing the target. And in missions in which stealth technology is being validated, the system must be dead-eye accurate to validate the stealthiness of a plane or its electronic counter-measures systems. So reliability and real-time response and accuracy are at a premium.

The solution for the GTRI team? OS/2, of course. OS/2 is easily adaptable to this configuration using a combination of device drivers, a multithreaded application, and the preemptive multitasking of OS/2 on an interrupt-driven system. GTRI disables PM, DOS/Windows compatibility, and swapping during data collection to give it a minimal system that easily meets the real time requirements of the Range Instrumentation System.

OS/2 Stretches and Flexes its Muscles

Remember the comparison of OS/2 and Windows to Beta and VHS videotape formats, and how it made OS/2 users feel? Well, look in any TV station control room or audiovisual production shop and you'll see Beta everywhere. If the TV shows you watched originated from VHS format tape players at the station, the viewing quality would be considerably worse. VHS quality is acceptable only for home users.

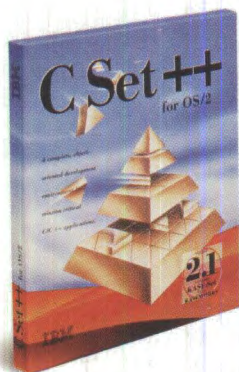
The same goes for OS/2. In addition to being used in many businesses, OS/2 is also on the front line for process control, point of sale, embedded systems, and custom applications that are deployed around the world. OS/2's flexibility and extendibility allow it to be customized to a wide variety of environments, each with their own unique requirements.

Although IBM is spending huge sums promoting Warp to increase OS/2's market share in the mainstream home and SO/HO markets, that certainly doesn't diminish its continuing attractiveness as a mission critical solution for business and government. If you want to get profitable or reliable, OS/2 gets the job done. ♦

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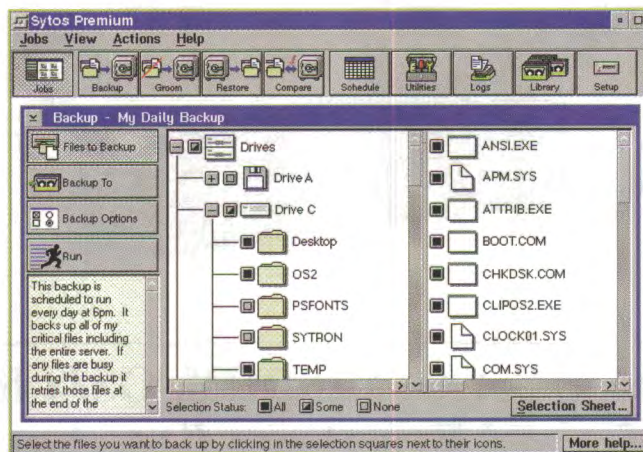
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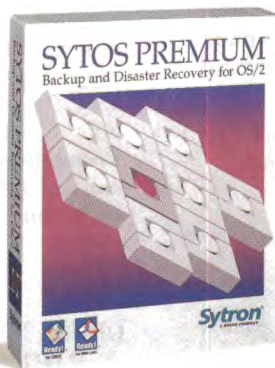
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HANDS ON

The Coming Crash

If you don't have a backup system read this!
Parallel port OS/2 systems can do the job.

BY GEOFFREY HOLLANDER

We've all been told. We've all told others. We've read it in books, stories, fables, maybe even comic books and supertitles. But like children warned too often, many of us don't hear it anymore.

Then it happens. *Crash!* There goes your data, or perhaps your hard drive *and* your data.

Now it comes down to this: you either have a current backup and survive, or you don't and won't. But finding the right OS/2 backup solution has been complicated, expensive, and frustrating.

Capacity, speed, and format universality are pivotal issues. But there are other key questions as well. Can data be read from and written to the same tape by different programs? Different operating systems? Can the same tape drive be used easily with more than one system? How well will these units support a network?

To simplify issues of hardware portability and universality, I looked at parallel port systems. Although they have traditionally been slower than floppy or SCSI controller-based drives, the technology is improving. I tested systems at opposite ends of the price, capacity, and speed scales. One early conclusion: for the most part, in capacity and speed you get what you pay for.

The test systems included Parallel Tape 250 by Iomega, the Backpack by Micro Solutions, and the Trakker by Colorado Memory Systems on the low end, and the more powerful PortaTape solution from PCX Inc. Software support was provided through BackMaster by MSR Development and BackupWiz by PCX. Until recently, low-end parallel drive support has been lacking in the OS/2 world despite the popularity of the format. BackMaster Version 1.1 not only supports the first two drives (with Trakker support scheduled to be available this month), but also writes an OEM version for the Iomega system.

QIC-500 Format

When writing data to the tape, BackMaster uses the QIC-500 logical format on a DC 2120 cartridge. Normally, backup system vendors bury such technical specifications in fine print or the back of the manual, electing to tout their wares based on capacity. How-

ever, the capacity specifications can be misleading. The DC 2120 was originally designed to hold 120mb of data—uncompressed. Now, with newer compression techniques, this same cartridge will hold about 250mb of compressed data. (Data typically will compress to about 50 percent of its normal size.)

QIC-500 is a superset of the popular QIC-40/80 format and provides compatibility with your existing DOS/Windows QIC-40/80 tapes. QIC-500 backup volumes can also coexist with QIC-40/80 backup volumes on the same QIC-40/80 tape. The QIC-500 specification allows BackMaster to work with the extended attributes native to OS/2, as well as with a wide range of non-FAT file systems such as HPFS.

It's important to note that while BackMaster doesn't default to the QIC-40/80 format, it will create a backup using the standard QIC-80 format when requested. Data written to the tape can then be read by any program that supports QIC-80. Normally, this is used when moving data from the OS/2 environment to a DOS/Windows environment. In addition to the drives tested, BackMaster will support a wide range of QIC mini cartridge drives that attach to your system's floppy drive controller or parallel port.

BackMaster is a true 32 bit Presentation Manager program with a full graphic interface. Its elegant simplicity of design makes this powerful program efficient and pleasant to use. BackMaster will allow you to perform backup and restore operations without interrupting other tasks. Options include an unattended backup utility and File Selection Sets that can be defined, saved, and then later recalled for backup or restoration. These are saved in individual .FSS files, so you can have as many different sets stored as you need.

One of the best features this program offers is the BackMaster Disaster Recovery Utility. It creates a set of boot and restore disks so that your entire system can be restored or installed to a bare, formatted hard drive using only diskettes and your backup tapes. No preliminary installation of the operating system or backup software is necessary.

While BackMaster offers some limited network support capa-

HANDS ON

bilities, it can't really be considered a solution to network backup needs. BackMaster was designed primarily to be an effective OS/2 backup application for standalones and small networks.

Consistent Results

Using BackMaster with each of the compatible tape drives gave good, consistent results. All the units transferred about 4mb per minute while backing files up and verified at about 3.5mb per minute. Note, however, that the type of parallel port you use will impact these figures somewhat. Our test system used a standard 4-bit in/8-bit out unidirectional adapter. Although using either a bidirectional port (8-bit in/8-bit out) or an EPP (Enhanced Parallel Port) will noticeably accelerate restore and verify functions, back up operations show no appreciable difference. This rate is limited by the tape drive itself.

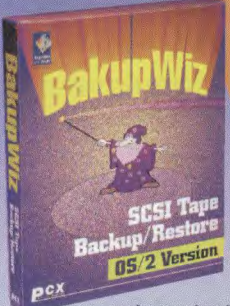
The Parallel Tape 250 and the Backpack are virtually identical in construction, looks, and performance. Both are compact and solidly built. Both have a permanently attached parallel cable connecting them to the system and a pass-through port used to connect your printer. Setting up one of these units is as simple as connect-

ing the cable and a standard 18 volt AC converter used to power it.

The Trakker's performance (using a beta test version of the software) was consistent with the other two units, but there were some obvious physical differences. The drive was somewhat larger than the others, and the converter and power cord were heavier duty.

Of more consequence, the cable connecting tape drive to computer was detachable. This was significant since on the first two tape units the cables were too short. With each of them, positioning the unit on a desktop for a connection to an under-desk tower was a problem. And connecting and disconnecting these fixed-cable units has to be done at the system end—a potential annoyance.

The cable supplied with the Trakker is six feet long, allowing you to put the drive virtually anywhere you wish. Furthermore, its use of a 25-pin female connector on the drive end of the cable permits the cable to connect both to the printer and the tape drive. Thus, you can remove the drive for use on another system without changing cables on the PC. If you plug tape cables into your individual systems, tape drive exchanges and local hookups are a snap to accomplish at the desktop level.




Your One Stop for OS/2 Backup...

BakupWiz

Ease of use is another of OS/2 BakupWiz's strong points. A simple, character oriented menu interface and command line operation are provided. OS/2 BakupWiz comes with support for most 1/4", 4mm (DAT), and 8mm tape devices. BakupWiz can also backup to other hard drives, file servers, minis/mainframes via TCP/IP, and removable drives including Bernoulli, Syquest, diskette, and magneto optical. There is even a version of OS/2 BakupWiz that supports many of the automatic tape changer mechanisms. Any SCSI host adapter that has an ADD driver can be used with OS/2 BakupWiz.

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gigabytes. Offering backup speeds using a high speed, bidirectional printer port, units in the PortaTape series are priced from \$995.

Members of the PortaTape series utilize a range of SCSI tape drives including 1/4 inch, 4mm, and 8 mm mounted in low profile external enclosures. Connection to the host system is via the system's parallel printer port, which may be utilized concurrently with tape drive operation. A copy of OS/2 BakupWiz is included with each PortaTape.

PCX also markets a complete line of standard SCSI tape backup units ranging in capacity from 250mb to over 10gb. Available in both internal and external models, these units are priced from \$550. For very large backup needs, PCX offers robotic tape loader mechanisms from 48gb to over 1 terabyte.

OS/2 BakupWiz is the SCSI tape backup solution you have been looking for! Designed to exploit OS/2's multiple threading, BakupWiz gives you a quick and reliable method to completely back up your OS/2 system. HPFS and FAT file systems are supported and Extended Attributes, Long File Names, System files, and the Workplace Shell are backed up. You can even restore your entire OS/2 boot volume from tape!






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or call 1-800-OS2-KWIK**

H A N D S O N

PortaTape

The larger PortaTape package is a SCSI-based parallel port tape drive with more capacity and greater speed than the QIC-based units. Its price, features, and performance are on par with the Parallel Storage Solutions line of parallel tape drives (reviewed in June 1994 and winner of *OS/2 Professional's* award for Best New Hardware for 1994). The PortaTape comes packaged with BakupWiz, which also supports a wide range of SCSI tape drives and changers.

BakupWiz for OS/2 is a character based application accessed through a simple pull-down menu system. Help lines and message windows provide additional information. Although BakupWiz uses a proprietary tape format, you will not sacrifice compatibility with your other machines. Through BakupWiz for DOS, your OS/2 files can be saved for DOS systems—without extended file attributes, of course, since they are not kept by DOS and therefore not transferred to tape.

While BakupWiz doesn't provide a ready-made utility for creating boot and restore disks automatically, it does include the IBM utility for creating OS/2 boot disks. With a bit of simple editing, you can modify the boot diskettes to create a fully armed boot and restore system. PCX says it plans to include a routine to automate this task in an upcoming version of BakupWiz.

The PortaTape system uses the DC-6525 1/4-inch tape cartridge, which holds 525mb of uncompressed data. BakupWiz doesn't currently offer any support for data compression, although PCX says compression is a likely addition to future upgrades.

The PortaTape unit can also be paired with Computer Data Strategies' new Back Again/2, a GUI based multithreaded 32 bit utility for SCSI tape drives and other backup media. Back Again/2 also offers command line functionality.

Data transfer using PortaTape is more than twice as fast as the smaller QIC drives because this backup system is SCSI-based. Backup transfer rates consistently came in at 8.5mb per minute, with verify and restore rates in the 6 to 6.5mb/min range. The PortaTape drive comes packaged with its own parallel-to-SCSI shielded cable, with a pass-through parallel plug built into the cable's SCSI connector.

The PortaTape unit and BakupWiz fully support Novell NetWare and any NETBIOS compatible networks. The network's file servers may even be backed up without requiring the users to log off the network. BakupWiz will back up and restore both file and network security information. Netware 286 and 386 (includ-

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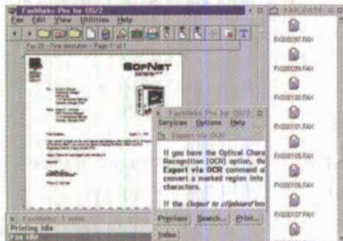
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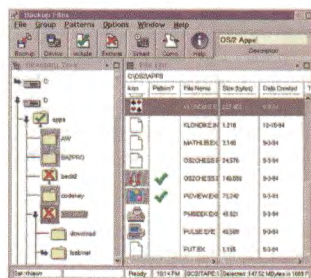
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HANDS ON

ing Apple File Protocol) are fully supported. The PortaTape package is easily portable, making it an excellent network solution for any company.

Need vs. Budget

The solution to your backup requirements is a need versus budget decision. For the single user or small office, any of the QIC-based drives would be a good choice—transfer rates are acceptable and the BackMaster software (in either standalone or OEM version) is a pleasure to use. Cross-system compatibility is good and the price is right—from \$399 to \$489. With little else to distinguish the various brands, your choice should be driven by price and physical features (e.g., size) or special features, such as the Trakker's more convenient cable.

If you need higher capacity and much greater speed, you can't go wrong with the PortaTape, especially in a heavy network or multisystem environment. You pay about \$800 more, but you get an industrial strength unit with software that can be set up to meet any contingency.

Either way, when it happens to you, you'll be ready. ♦

Geoffrey Hollander is the principal of Mail Pouch, a computer service bureau based in Lake Oswego, Oregon, that serves the direct mail marketing industry.

AT A GLANCE

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Woodbury, MN 55125
(612) 730-4156 fax (612) 730-4161
List Price: \$149 (SCSI version)

BackMaster version 1.1

MSR Development
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132 Lincoln Hwy
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List Price: \$489 (900 megs)
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Parallel Tape 250

Iomega Corporation
1821 West Iomega Way

Roy, UT 84067
(800) 777-6654 fax (801) 778-3000
List Price: \$395

Parallel Storage Solutions

116 S. Central Ave.
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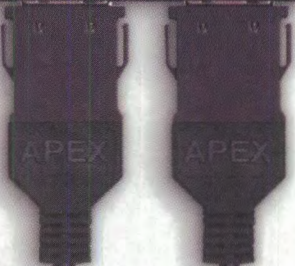
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LinkRight Version 1.1b

REVIEWED BY HERB TYSON

LinkRight is a file transfer program, one of a new category of utilities designed for today's business road warrior and other users who need to transfer files between desktop and portable computers. Similar in concept to LapLink, the best-known DOS program of the same genre, LinkRight lets you copy files between two systems using the machines' parallel or serial ports.

What do you do with a file transfer program? Well, let's say you need to take a portable computer away from the office on a business trip. You'll likely need to copy some working files—spreadsheets, documents, and the like—from your desktop system to the portable. Upon your return, you'll need to reverse the process. Most users, especially if they aren't working with many files, copy them to a floppy diskette that they then sneaker back and forth.

But what if you have tons of files? What if you need to perform such transfers on a daily basis? LapLink for DOS has been a popular answer to that question, since it makes high speed file trans-

fers possible between PCs. But LapLink doesn't quite fit the bill for OS/2 users. It doesn't, for example, copy extended attributes (EAs), nor can it see and copy HPFS files with long file names. Hence LinkRight for OS/2 offers a useful solution for moving files between parallel ports. The software also allows serial port

transfers, but we don't think that's a particularly efficient way to go; if serial ports are your only file transfer i/o route, modem software makes more sense.

LinkRight is no panacea. It is slower than its DOS cousins. In fact, in some circumstances it is no faster than copying files via diskette. We were never able to establish a serial-to-serial OS/2 connection. (Luckily, as we suggest above, this isn't a desirable transfer mode.)

Nonetheless, an OS/2 file transfer utility that works with HPFS drives and retains long filenames and EAs is a useful tool.

Installation and Setup

Easily installed from its single diskette, LinkRight 1.1 unpacks less than 2mb of files into a LinkRight directory and



Figure 1. When LinkRight is transferring files, the remote system displays an activity screen.

Table 1. Comparison of file transfer rates (in minutes and seconds) using LinkRight.

Table 1				
Local/Remote Designation	Remote to local using 256 byte packets (default)	Remote to local using 1024 byte packets	Local to remote using 256 byte packets (default)	Local to remote using 1024 byte packets
Local 386-25 Remote 486-33	2:49	0:59	1:49	0:51
Local 486-33 Remote 386-25	1:59	1:01	1:21	0:44

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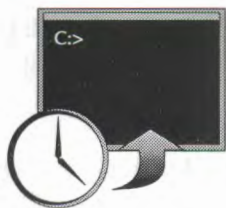
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LRPAR.SYS into an OS/2 system directory. If you're using OS/2 2.1 or earlier and want to use the parallel port, the installation program also provides a replacement PRINT01.SYS or PRINT02.SYS. These are the same LPT drivers that come with OS/2 2.11, and they're essential for LinkRight. The installation program advises you of the changes it's making and why. It will—upon getting your consent—modify the CONFIG.SYS file to load the necessary LRPAR.SYS file for using the parallel port.

As the brief printed manual (new in this upgrade) implies, LinkRight's setup is straightforward. You designate one computer as local and the other as remote (all operations are controlled via the local computer) and tell LinkRight how the two systems are connected: LPT1, 2, or 3 or COM1, 2, 3, or 4. You'll end up with two directories displayed side by side on the local computer, as shown.

Files can be transferred in either direction. You move within the displayed directories by double-clicking where you want to go (or by highlighting and pressing Enter), just as with most directory programs and OS/2 drive objects. To transfer selected files, click on the Copy button. LinkRight also provides buttons for deleting files and creating new directories. While receiving or sending a file, the remote system displays an activity screen, as shown in Figure 1.

LinkRight provides several features for managing your transfers. It can create and maintain a log of all file transfers. Should you need to copy entire directories, simply mark the files and then send them all at once. Other options include the ability to set up the software not to copy files where more recent versions already exist.

An especially interesting option is the ability to retain a file's extended attributes when copying it to a DOS system. (This is possible with FAT-formatted drives only, since DOS cannot access HPFS.) LinkRight comes with a DOS module that sets up a computer running in DOS as a remote system. (Under some circumstances where high volumes are to be transferred over a serial link, you may attain better transfer rates by booting one of the systems as DOS even if it has OS/2 available.) To the local OS/2 system, the remote DOS link looks identical to a remote OS/2 link—the only problem is that DOS typically is unaware of extended attributes. However, LinkRight can optionally read and write EAs from and to EA DATA. SF, even when DOS is booted.

Another unique feature is LinkRight's ability to clone an OS/2 boot partition. This lets you copy an OS/2 setup—lock, stock, and operating system—from one computer to another. Setup is a little tricky (and tedious), and copying an operating system takes



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hours. However, if you don't have a network or a common tape backup system, LinkRight can provide the means.

Performance

Performance, or rather a *lack* of good performance, was a key issue for LinkRight version 1.0. While LinkRight could move files between systems, it was painfully slow. LinkRight 1.1b is somewhat faster, but still quite slow. Table 1 shows the times in minutes and seconds it took to perform a parallel transfer of a 500k file between two systems with various options enabled.

LinkRight is no speed demon when it comes to transferring files between parallel ports. To put these times into perspective, it took less than one second to transfer the file to another networked PC over LAN Server. It took just 20 seconds to copy the same 500k file to a floppy disk, and another 20 seconds to copy it from floppy back to hard disk. If it takes an additional five seconds to move the disk from drive to drive, then simply using a floppy is as fast as using LinkRight at its fastest to copy a single 500k file. This does not factor in the time it takes to cable the two systems, start LinkRight, and establish a connection.


If you must use LinkRight over a serial connection, you'll be in for even slower transfers. The remote-to-local serial transfer rate using 256 byte packets was a sloggingly slow three minutes!


All this notwithstanding, for larger transfers and OS/2 files that won't fit on a single floppy, the edge goes to LinkRight. Compared to LapLink, it is decidedly slow. However, if you compare the rate of speed for transfers of extended attributes and long HPFS file names, you'd be waiting an awfully long time for LapLink—it won't perform those transfers at all. Moreover, other OS/2 Professional staffers have found LapLink simply unworkable on an OS/2 system.


Slow transfer rate notwithstanding, LinkRight is an efficient method for transferring lots of files when you don't have the benefit of a network connection. However, LinkRight's sluggishness makes scheduling an important factor. You would probably want to run LinkRight while you're away from your system.


Other considerations are important as well. For example, as shown in Table 1, transfers are considerably faster when going from local to remote systems. So if you are transferring files from a laptop to a desktop system, you should designate the laptop as the local system. You'll also achieve slightly higher transfer rates by disabling LinkRight's Verify mode. It was initially used by the developers as a debugging feature and RightWare decided to leave verification in the production version as an option. In our tests,


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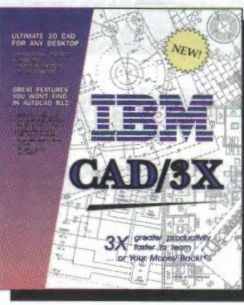
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
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once a connection was established, we didn't find any cases where data was lost.

Bottom Line

LinkRight falls short of what we'd expect from a state of the art transfer utility. In fact, it wasn't until we upgraded to this new version 1.1b that we finally were able to work with it. Ultimately, we never did manage to get a native OS/2-to-OS/2 serial connection established—we had to resort to booting the remote system up in MS-DOS 5.0 and running LinkRight's LRDOS.EXE module.

Moreover, we find the task of disconnecting the printer or serial port cable somewhat daunting. LinkRight could put itself ahead of the game if the company would provide hardware that lets you connect to the LPT port without having to disconnect the existing cable. If you elect LinkRight as a regular data transfer solution, you would do well to buy an RS-232 switch box.

Do we recommend LinkRight? Well, yes, with some caveats. It's not the best OS/2 file transfer solution. If you have ample memory and disk space on your laptop system and an available LAN system, you would probably do better in the long run to put an OS/2 LAN client on the laptop. To keep from using more memory than necessary when not doing transfers, you could always set up separate CONFIG.SYS files: one that loads the network drivers, and another that does not (with Warp, the system can be configured to switch between versions at boot time). If you have many files to transfer, you would find the split-second response well worth the effort.

On the other hand, if you work away from the office, the text files, spreadsheets, and documents you produce likely don't come anywhere near 500k. For 10k or 50k files, LinkRight's speed is a non-issue. Provided you can equip your systems with a convenient method for connecting the ports (an extra parallel port might not be a bad idea), LinkRight provides a sound solution to a nagging problem for computer commuters. ♦

AT A GLANCE

LinkRight Version 1.1b

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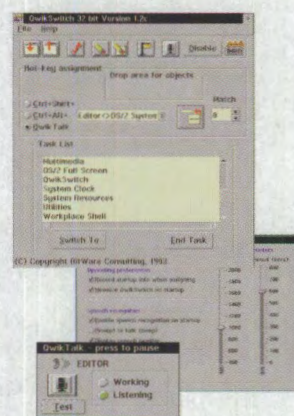
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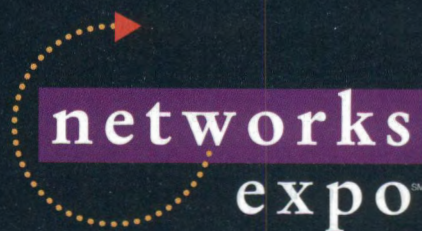
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MARKETLINE

Product News for the OS/2 User

SCOOPS

Lotus adds Value Pack to SmartSuite

In another bid to claim the OS/2 suite marketplace as its own, the Lotus Development Corp. last month unveiled Value Pack for OS/2, a set of tools that improve desktop functionality and SmartSuite's integration into OS/2.

At the heart of this release is SmartCenter, an object based launcher bar that Lotus first developed for its SmartSuite for Windows 3.0. With this toolbar, users can consolidate frequently used application objects in a central loca-

tion from which the applications can be launched. The toolbar is easily customized using drag and drop.

Also included is a set of 14 macros that automate cross application tasks involving Lotus's Ami Pro, 1-2-3, and Freelance Graphics. One provides a Collect and Copy function, enabling users to incorporate spreadsheets and graphics into Ami Pro documents.

A long awaited tool included in the Value Pack is a 1-2-3

File Translator which allows users to exchange files between the OS/2 and Windows versions of 1-2-3; a coupon entitles users to a copy of Freelance Translator when it ships sometime next year.

The final component of the new product, REXXLink for 1-2-3, is used to create macros and @functions for use within 1-2-3 spreadsheets. It includes eight sample REXX routines and a sample worksheet.

The Value Pack requires SmartSuite 1.1 and OS/2 2.1

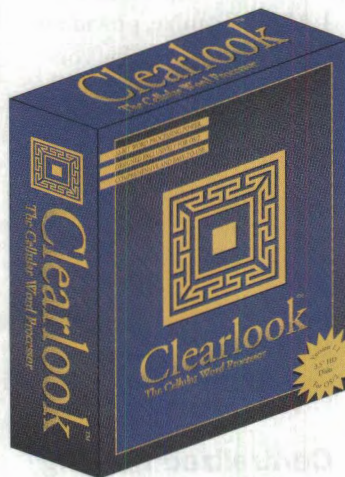
or higher. A Lotus official said the Value Pack will be available to registered SmartSuite users for \$10 by mid-December (call 800-TRADEUP), and it will be included in SmartSuite boxes beginning early in 1995.

Sources also reported that an agreement that would bundle Warp with the SmartSuite for OS/2 is in the works, although one insider cautions that it is "far from certain." Pricing for the two-product package would be less than \$100.

New Products

A cellular approach

Clearlook Corporation's word processor, Clearlook 1.1, is the latest addition to the OS/2 word processing marketplace. Built on an object model and offering what the company describes as a "cellular" approach to working with text, Clearlook allows users to move, size, clone, or place in a document an unlimited number of text areas or cells. The application also includes a Text Transformation feature for mail merge, envelope printing, tables, and indexes. The multithreaded 32 bit word processor is available for a limited time at an introduc-



tory price of \$199. Clearlook Corporation, PO Box 11219, Burke, VA 22009-1219. (703) 425-1163, fax (703) 764-3746.

It's enticing

SofTouch Systems, Inc. welcomes Windows users into the OS/2 fold with version 3.0 of GammaTech Utilities for OS/2, a kit of disk tools of the kind DOS users have traditionally relied upon. This new release includes a number of additional features including a disk map that displays the layout of FAT and HPFS volumes, graphic representation of the optimization process for FAT volumes, automated HPFS optimization, and the ability to edit binary files in ASCII format. GammaTech Utilities for OS/2 normally lists for \$149, but through the

end of March, it is available to new Warp users for \$99.

SofTouch Systems, Inc., 1300 S. Meridian, Suite 600, Oklahoma City, OK 73108-1751. (405) 947-8080, fax (405) 632-6537.

REXX tools

Innovative Business Technologies, Inc. is now shipping REXxVIM, a Vendor Independent Messaging toolkit for OS/2 REXX. REXxVIM enables REXX use as a development environment for mail applications. Using REXxVIM, REXX applications can communicate directly with e-mail systems like Lotus's Notes and

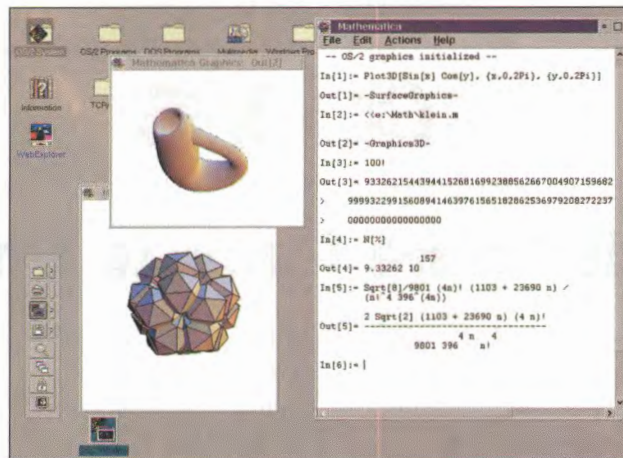
cc:Mail. The suggested single user price is \$295; multiple copy discounts are available. Innovative Business Technologies, Inc., 7137 Shady Nelms, Suite 204, Columbus, OH 43017. (614) 791-9055.

Number cruncher

Wolfram Research, Inc. has released a native OS/2 version of Mathematica, its scientific and technical problem solving application used in corporate and academic settings. Mathematica 2.2 for OS/2 contains hundreds of built in functions and is used as an interactive computation tool, providing numeric, symbolic, and graphical computing capabilities. Mathematica 2.2 for OS/2 is priced at \$995, with academic pricing starting at \$795. Wolfram Research, Inc., 100 Trade Center Drive, Champaign, IL 61820-7237. (800) 441-MATH.

Electronic banker

A pioneer in native OS/2 personal and small business financial applications, Spitfire Software is shipping In Control for OS/2, a competitor to Intuit's Quicken for personal finance management. The 32 bit product supports multiple sets of books and unlimited accounts, handles currency conversion, and also provides a set of integrated systems for managing multiple-year budgets, accounts payable/receivable, fixed assets, securities, insurance, and tax data. Cost: \$79. Spitfire Software, 325 Breakwater Ridge, Atlanta, GA 30328. (404) 257-0187.



Mathematica allows users to render complex projects in two- and three-dimensions.

Project management

Interplan Systems is now shipping INTERPlan, a native OS/2, client/server based project management application. INTERPlan's multi-user database architecture supports organization-wide access to and consolidation of plans, actuals, and performance data. Training classes are available. Pricing starts at \$2,900 per single user; additional users cost \$395. Interplan Systems, 4931 Delhi Pike, Suite 100, Cincinnati, OH 45238. (513) 451-5956, fax (513) 451-5613.

New level of compression

Stac Electronics has upgraded Stacker for OS/2 and DOS with version 4.0, which it says will give OS/2 users hard drive compression ratios of more than 2:1. Stacker 4.0 operates faster than previous versions by taking advantage of OS/2's system cache. It includes Stacker's Tuner and Toolbox features, which allow users to customize and monitor their system's performance.

The product is scheduled to be available early in January, and will sell for \$100. Stac Electronics, 12636 High Bluff Drive, San Diego, CA 92130-2093. (619) 794-4300, fax (619) 794-4570.

Dialing for credit

Systems Consulting Services, Inc. is currently shipping BIAS (Business Information Analysis System) for OS/2 Warp. This commercial credit/risk analysis product is LAN compatible, providing users with a single dial connection to consumer and commercial credit reporting bureaus. Prices range from \$3,000 to \$12,000 depending on the level of connectivity. Systems Consulting Services, Inc., 5058 Dorsey Hall Drive, Suite 203, Ellicott City, MD 211042. (800) 787-4140, fax (410) 730-4044.

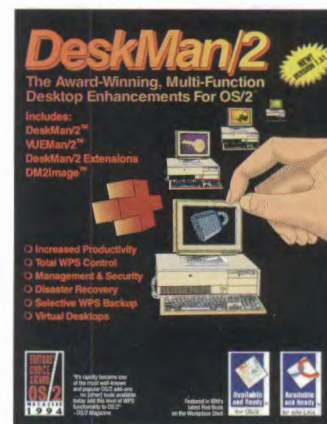
Centralized booting

BootWarePLUS for OS/2 from Lanworks Technologies, Inc. allows workstations to boot OS/2 from a network file server instead of a local drive.

In addition to simplifying routines for the workstation user, BootWarePLUS for OS/2 frees local disk space while reducing time spent on workstation installation. Pricing ranges from \$49-\$79. Lanworks Technologies, Inc., 2425 Skymark Ave., Mississauga, Ontario, Canada L4W 4Y6. (800) 808-3000, fax (714) 367-0895.

Utility suite upgrade

Development Technologies, Inc. has upgraded its utility suite, DeskMan/2, to version 1.51, adding enhancements that take advantage of Warp's new functionality. The new release supports OS/2's new animated icons, launchpad, and other customizable options offered by the Workplace Shell. It also offers increased speed while reducing overall memory consumption. The suggested list price is \$80; quantity pricing is available. Registered users can upgrade at no cost. Development Technologies, Inc., 308 Springwood Road, Forest Acres, SC 29206-2113. (803) 790-9230.



News

IBM repositions voice products

In a move to reposition its products in the hot speech recognition marketplace, IBM last month changed the names of several of its products, while also rolling out versions for Windows and laptop users.

IBM's discrete speech recognition product, launched as the IBM Personal Dictation System (IPDS), has now been renamed the VoiceType Dictation family of speech products. VoiceType is based on software that can utilize large vocabulary databases to recognize spoken text. It is speaker dependent and requires a user to speak slowly, pausing momentarily between words. IBM is initially targeting several professional markets with predefined language models geared toward the medical, legal, and journalistic fields. The standalone version of VoiceType Dictation for OS/2 sells for just under \$1,000 and is available in seven languages.

IBM's Continuous Speech Series (ICSS), a more flexible, speaker independent command and control application, will for now retain its name while Big Blue focuses on increasing VoiceType's commercial profile.

The name change was "meant to give [speech recognition] more of a consumer-oriented appeal," something it has lacked because of imma-

ture technology and a relatively high purchase price, says IDC analyst Richard Zwetchkenbaum. IBM Marketing Director Howard Fields concurs that, to a certain degree, the change was an effort to broaden the product's appeal. "We want to see an increase in retail store sales," he says, adding that IBM plans to preload VoiceType on some PC and ThinkPad models.

Stac's acquisition

Stac Electronics in October acquired Ocean Isle Software for \$20 million. Ocean Isle is the privately held developer of ReachOut, a remote and file transfer utility that enables users to access data via modem or LAN.

The purchase was part of Stac Electronics's overall strategy to expand its product line beyond the data compression field and into the enterprise storage and access market, said Stac CEO Gary Clow.

ReachOut is a leader in the category of remote access software, a market that, according to IDC analyst Elisabeth Rainge, is worth some \$94 million and is expected to grow by 30 percent annually during each of the next three years.

Sybase, Powersoft merge

Two giants in the client/server software industry last month announced plans to merge, a

move that will make the new entity the seventh largest software company in the world.

Sybase Inc. and Powersoft Corp. made the announcement during Comdex in Las Vegas.

Under the terms of the agreement, Powersoft will operate as an independent subsidiary of Sybase Inc., with Powersoft CEO David Litwack reporting to Sybase COO Dave Peterschmidt.

Sybase develops and markets a variety of database software and development tools, while Powersoft leads the field of client/server development tools, with an approximate market share of 40 percent. Combined, both companies will share more than 2,000 independent software vendors and application partners.

German preload mania

IBM has been aggressively pursuing OEM agreements with a number of German PC manufacturers. The latest deal came in mid-November when IBM Europe announced that German PC manufacturer Vobis Microcomputer AG signed a three year contract to preload Warp on every Intel-based PC it manufactures. Headquartered in Aachen, Germany, Vobis is that country's largest manufacturer of PCs, with some 300 distributors worldwide. Last month, according to Tim Fowler,

IBM's European business manager, Big Blue upped its share of the German preload market to 40 percent.

Also last month, three other German manufacturers—Escom, Peacock, and Comtech—agreed to preload Warp on their machines.

Drawing power

For the past two years, a small team of software developers in southern Florida has been quietly laboring to bring a high end graphics application to the OS/2 marketplace.

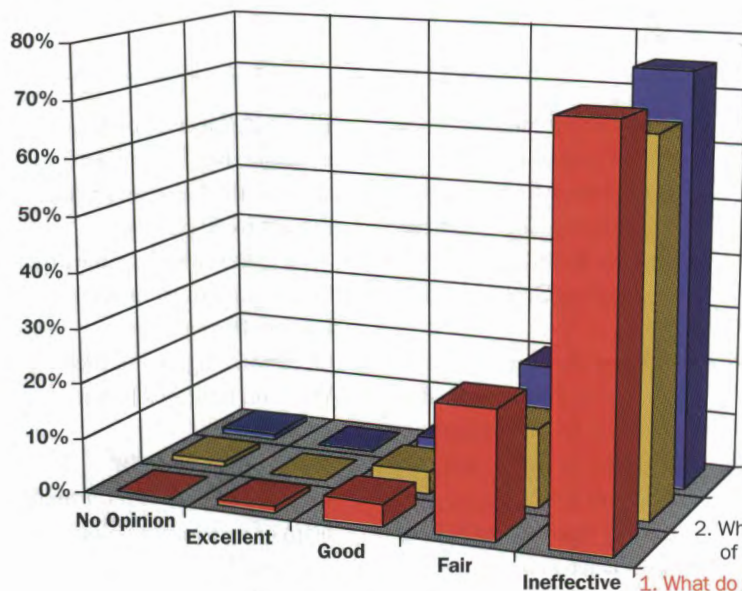
The company, SPG, is now putting the final touches on ColorWorks, a full-featured native 32 bit paint program that will utilize a process known as dynamic in-memory image compression (DIMIC) to edit large files in their compressed forms. This technique will reduce the amount of memory normally required to perform such editing tasks by as much as 90 percent, according to SPG's Joel Krauthelm.

Krauthelm says the product loads into a mere 1mb of RAM, and will be symmetric multiprocessing (SMP) ready, allowing the drawing process to be distributed to as many as 64 processors.

At press time, SPG said that it hoped to ship the new product by the end of this month, but that packaging and documentation may push that date back. ♦

OS/2 PROFESSIONAL

RESULTS OF SURVEY #1



In September, we asked you to tell us what you thought of IBM's marketing efforts. We also asked you to rate the marketing and advertising of OS/2 and key OS/2 apps, their visibility in retail outlets and catalogs, Lou Gerstner Jr.'s efforts to date, and the likely impact of the forthcoming Windows 95 on OS/2.

You told us, in no uncertain terms. Almost three quarters of the respondents described IBM's marketing and advertising of OS/2 as "Ineffective"; more than 95 percent of you considered it no better than fair. The results, of our unscientific fax survey, are listed below.

3. What do you think of the marketing and advertising being done for OS/2-compatible applications?

2. What do you think of IBM's marketing and advertising of Lotus SmartSuite?

1. What do you think of IBM's marketing and advertising of OS/2?

1. What do you think of IBM's marketing and advertising of OS/2?

Excellent	.63%
Good	3.78
Fair	23.15
Ineffective	71.88
No Opinion	0.00

2. What do you think of IBM's marketing and advertising of Lotus SmartSuite?

Excellent	0.00%
Good	4.40
Fair	14.47
Ineffective	66.67
No Opinion	.63

3. What do you think of the marketing and advertising being done for OS/2-compatible applications?

Excellent	0.00%
Good	4.40
Fair	19.50
Ineffective	75.47
No Opinion	.63

4. Have you ever seen OS/2 or OS/2 applications in retail outlets?

Yes	88.65%
No	16.35

If so, have you purchased OS/2 or OS/2 applications in retail outlets?

Yes	53.96%
No	46.03

5. Have you ever seen OS/2 or OS/2 applications in computer catalogs?

Yes	88.75%
No	11.25

If so, have you purchased OS/2 or OS/2 applications via a catalog?

Yes	71.85%
No	28.15

6. What do you think of Louis Gerstner's belt-tightening efforts?

Long overdue and needed	54.09%
Not sure	38.36
It's gone too far	7.55

7. What do you think will happen to OS/2 when Chicago comes out next year?

OS/2 will compete toe-to-toe	37.25%
OS/2 will be forgotten in the Chicago furor	47.06
The market will select OS/2 as the operating system of choice	5.88
No Opinion	9.80

All responses were before the October 12 launch of OS/2 Warp. In future issues we'll report on how your perceptions of IBM and Warp changed through the October-December launch campaign.

OS/2 Vendor Council

"Growing the market for OS/2 and related products."

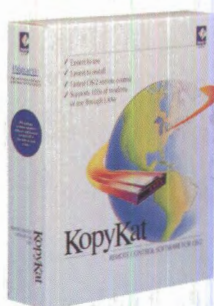
◆ Performance Plus Version 3 by Clear & Simple, Inc.

Performance Plus, Version 3, a tuning and utility kit for OS/2 Warp and 2.1, is simple enough for an end-user yet powerful enough for a techie! A new simple interface (GUI) and fine tunes your system with context sensitive help that "teaches while you tune." Includes a DOS/Win application optimizer and numerous other new features. Comes with extra diskette filled with spectacular OS/2 bitmaps.



◆ PowerPak by Arcadia Technologies, Inc.

The PowerPak is an indispensable add-on tool for your IBM Works suite. It creates programs for maintaining Works databases and schedules them according to your requirements. Ask your dealers for special bundle price (only \$15!) with Warp upgrade.

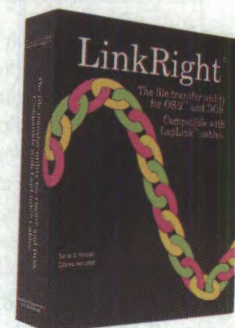


◆ KopyKat by Hilgraeve

KopyKat is a graphical OS/2 remote control solution. You can display the entire desktop of a remote OS/2 system in a window on your OS/2 system. Do anything remotely, that you can do locally. KopyKat supports 200+ modems by name and any Netbios compatible network.

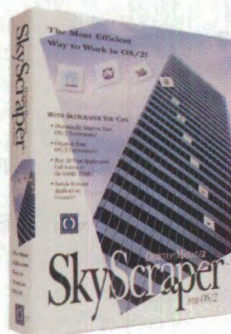
◆ LinkRight by Rightware

LinkRight is a parallel port and serial port file transfer utility made especially for OS/2. The package includes a PM version, an OS/2 command line version, and a DOS version. Maintain EA's and long file names. Supports HPFS and FAT files. CRC checking to insure accurate transfers. Compatible with LapLink cables.



◆ SkyScraper™, Desktop Manager for OS/2 by Binar

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◆ Relish by Sundial Systems Corp.

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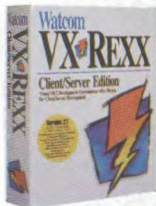
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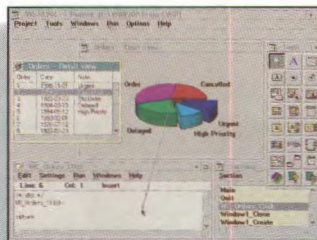
If you're looking for fast and easy application development for OS/2, then take a look at the award-winning Watcom VX•REXX visual development environment. VX•REXX lets you build applications to exploit the graphical user interface, multi-threading, and multi-processing power of OS/2. VX•REXX Client/Server Edition gives you the added power to access DB2 or other database systems, manipulate the

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Peter Coffee, PC WEEK

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THE IS NOTEBOOK

Tips and Techniques for the OS/2 Professional

Color Us Warped

BY GORDON SCOTT

Desktop color schemes are like software manuals—the only time you think about them is when they are poorly done. After you thought about your OS/2 2.1 color scheme, though, you realized that you had few alternatives; you chose one of the eight available schemes, or took the time to configure one (or more) of your own.

When you upgrade to Warp, you'll discover you have many more options for desktop color schemes. Instead of the eight variations of "neutral" found in the scheme palette for OS/2 2.1, Warp's default screen palette gives you a score of well-coordinated system colors. There's also plenty of room to add your own color schemes.

IBM's developers made two significant changes that help you design a desktop color scheme. First, you can optionally specify a bitmap picture or pattern as a folder or desktop background. Second, Warp's improved performance removes the tedium of tailoring background patterns with the erstwhile slow-as-Boston-traffic icon editor.

There are those who will argue that any time spent tweaking color schemes is wasted. But aesthetics aside, don't forget that a nice looking desktop will draw the interest of users of other OSs. After seeing what you are able to do with Warp, they may well decide to switch to it. More Warped users means more Warped applications, which means higher factors of Warp speed for you. (If you don't buy that reasoning, then remember that research labs in both Boca Raton and Redmond have reported increased productivity among laboratory rats exposed to customized desktop color schemes.)

Add a bitmap background to your schemes.

- Click once on the desktop with the right mouse button to bring up the desktop popup menu.
- Select the **System** setup menu item.
- Open the Scheme palette by double clicking on the Scheme palette icon.
- Double-click the left mouse button on one of the predefined schemes, such as Emboss, to display the **Edit scheme** dialog.
- Press the **D** key to display **Desktop background** in the Window area entry field. (The **Edit background** pushbutton becomes available for use.)
- Select the **Edit background** pushbutton. (A new dialog box displays.)
- Deselect the checkbox labeled **Color only** by left clicking on it.
- Select the drop down button on the entry field that displays the name of the bitmap files available.
- Select a bitmap pattern (such as OS2TILES).
- Close the **Edit background** dialog box.
- Close the **Edit scheme** dialog box.
- Apply the change you've just made by holding down the ALT key, dragging the color scheme from the scheme palette, and dropping it on the desktop.

Every time you apply that scheme the background of your desktop will change to the bitmap you specified. If you select several different bitmaps for different schemes, then changing your bitmap background becomes as easy as dragging a new scheme to the desktop.

Warp provides several new bitmap patterns including pine trees, textured tile, and marble surfaces. You can also use any bitmap you have available as long as you copy it to the \OS2\BIT-

MAP directory on your boot drive. And if you think you'd prefer a different color of marble surface, or a slightly different look to the background bitmap, you can change it by editing the bitmap with the icon editor.

Edit bitmap backgrounds to change the color of images.

- Open the scheme palette.
- Double-click on any scheme.
- Press **D** to select **Desktop background** in the Window area entry field.
- Select the **Edit background** pushbutton (a dialog box displays).
- Select a bitmap pattern for the scheme (such as OS2TILES).
- Select the **Edit...** pushbutton under the bitmap entry field to open OS/2's icon editor.

The icon editor displays the bitmap pattern you have selected. It also displays a color palette based on the screen resolution and color depth of your system. The available colors are displayed to the right of the bitmap image. As an example, you can change the basic gray color of OS2TILES.BMP to blue while still maintaining its textured 3-D look. To do this, you'd use the following steps.

- Click the left mouse button on the medium gray color used for the background of OS2TILES.BMP (a green selector frame displays around the gray color).
- Click the right mouse button on one of the shades of blue (a red selector frame displays around the blue color).
- Press Alt + N to swap the colors on the palette and in the bitmap image as well.
- Save the new bitmap. (Select either **Save** or **Save as...** from the File pull-down menu.)



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- Close the icon editor.
- Close the **Edit background** dialog box.
- Close the **Edit scheme** dialog box.
- Apply the changed scheme by dragging it from the scheme palette and dropping it on the desktop.

If you follow these steps, your system's desktop background will feature blue tiles with a 3-D textured look bearing the OS/2 logo. Using this same technique you can make different colored pine forests for all seasons, different colored spirals, or a stars background with black instead of blue coloring.

This feature won't be one of your top ten productivity boosters, but you're guaranteed to have a screen background that stands out. ♦

Gordon Scott works for IBM in San Jose, California. He can be reached via the Internet at gscott@stlvm22.vnet.ibm.com.

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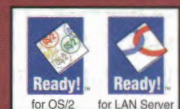
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INPUT

continued from page 11

OS/2), and my first document created with IBM works. Needless to say, I've been Warped! So far I'm extremely pleased with the new version. Fast, no installation problems, and no glitches!

The very first thing that I did after installing the system was to get rid of that silly launchpad. I've always preferred to have my icons right on the desktop.

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I am also very impressed with the Internet stuff. I am a rank beginner but these tools take a lot of the sting out of getting your feet wet on the net. ♦

Gary L. Robinson
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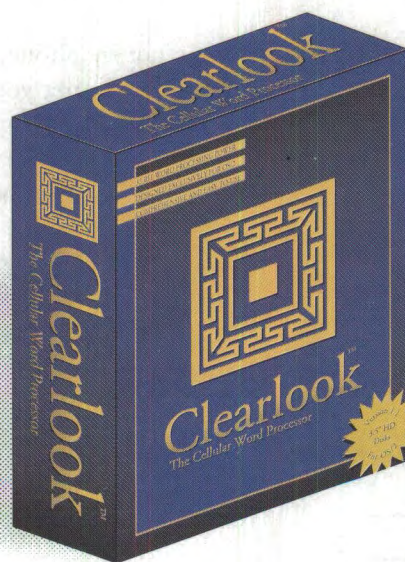
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December 1994 OS/2 Professional 73

A message regarding Warp Full Pack with Win-OS2 from OS/2 Express

Dear OS/2 user:

As we all eagerly await the arrival of the Warp Full Pack with Win-OS2, which installs directly over any existing OS/2 2.x system, we can look back on the arrival of Warp without Windows and learn. From that experience, we know that IBM will heavily promote the product, that the demand will be greatest in the first few weeks of product availability, and that demand will more than likely outstrip availability in the first weeks. Anxious customers will be waiting for stores and catalogs to supply this long overdue upgrade.

The Full Pack will be available sometime in Q1, but no one knows when that will be—January, February, or March. But this much we do know: *OS/2 Express* will be among the very first outlets to receive shipments. We're going to turn that to your advantage. To provide our customers with the fastest and earliest delivery of the Warp Full Pack, *OS/2 Express* will:

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BOOKSTAX

OS/2 2.11 Power Techniques

Que, \$49.95, 1,265 pages

REVIEWED BY JAMES M. HANSEN

IBM historically has been tight-lipped about the technical details of its products. And why not? For most of its life IBM has been a closed society dedicated to the selling of machinery, programs, and especially service, and was not one to give away the sorts of details that would help users fix things themselves.

But after studying the situation for a good many years, IBM recognized that editorial coverage in magazines and computer books had some merit, and eventually concluded that there were a few good reasons for telling people about its products and how to use them.

So IBM started the "Red Book" program, a relatively low budget effort to provide controlled insider information to the public. Red Books are written by international teams of IBMers—teams that sometimes even include customers!—that document everything there is to know about a particular product from as many points of view as possible without giving away any trade secrets.

This team product typically is compiled over an intense eight week period. Red Books are not known for glitz or glamour, but what they lack in style they more than make up for in substance.

OS/2 2.11 Power Techniques is a compilation drawn from several Red Books. And it looks it. You'll find no wasted pages, useless illustrations, cartoons of questionable humor, or author profiles. Virtually every page in this book is filled with tightly written information describing just about every aspect of OS/2 in surgically precise language.

Without a doubt, if you could have but one OS/2 book, this is the one to have. Every feature in OS/2 is documented, every option, every nuance. The entire history of the operating system is laid out, detailing its growth feature by feature, and the contents of every ServicePak are documented.

The operational features and facets of OS/2 are described in far greater detail than you'll find in most "how to" books. Ultimately, though, this book is valuable not because you will learn OS/2, but because it teaches the underlying design philosophies that make OS/2 unique. And once these are understood, OS/2 use and application become almost second nature.

At the same time, this is a very practical book. Two particularly useful chapters detail OS/2 tuning and maintenance along with troubleshooting information. With more than 300 pages devoted to these subjects, you'll find that little is left to doubt.

For example, six pages explain all of the variables that affect printing performance, what the tradeoffs among them are, and how to manage the compromises. Particular attention is paid to spooler operation, with complete examples showing the operational impact of various settings.

Another interesting tidbit you'll find in *OS/2 2.11 Power Techniques*—a rather important tidbit, in fact—is how to get hold of IBM anywhere in the world. Starting at page 1,090 you'll find listings of IBM support telephone numbers, along with how to reach IBM through CompuServe, the Internet, Prodigy, and a number of other services as well. IBM BBS numbers are also listed, with information on using those boards.

Were the book not enough by itself, the CD-ROM included





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BOOKSTAX

with it is filled with OS/2 utility and application programs directly from IBM, many of them being made available to the public for the first time. Also included are the texts of the ten original "Red Books" used to write the book!

No mere rehash of stale shareware or public domain utilities, the programs on this disk include a nifty new Print Monitor/Manager, a utility for making and distributing new desktops, and a plethora of OS/2 tools and utilities previously available only to those working inside IBM.

This book is in a class by itself. But don't let this reviewer's enthusiasm influence your interest—run down to your local bookstore and check it out for yourself. ♦

James M. Hansen, president of New Boston MFG Technologies in New Boston, New Hampshire, is a writer on technology and computing topics.

CEnvi for OS/2

There are a million solutions in this little tool. Here are a few to get you started:

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#58 NUMLOCK: Maintain NUMLOCK on for all session.

#87 UNHANG: Prevent WPS lockups

#48 KEYPUSH: Emulated keystroke control of any window

#22 DOMENU: Automated menu selection for PM applications

#61 OS2DEMO: Show this to Windows users & watch them drool

#91 WIN BOSS: Automated control of WINOS2 sessions through keyboard, menu and dialog control, and Windows functions

CEnvi interprets the Cmm macro language to enhance batch/REXX files or to create new utilities. With over 150 built-in functions, and links to any OS/2 or DLL function, there is no limit to your CEnvi scripts.

For more information about CEnvi, multi-user licensing, or to learn about incorporating the Cmm macro language into your application, contact:

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Circle #215

The Ultimate OS/2 File Management Toolkit

By Len Dorfman and Mike Stegmen, Windham/McGraw-Hill, 274 pages, \$29.95

REVIEWED BY GORDON SCOTT

If you had to choose only one book from which to learn OS/2, *The Ultimate OS/2 File Management Toolkit* by Len Dorfman and Mike Stegmen would not be a bad choice. On the other hand, if you happen to work in an IS department where you have a solid understanding of DOS details and Windows tricks but are just getting started with OS/2, this book may be your best choice.

The title is a bit misleading. It may give you the impression that the book is a comprehensive collection of details about OS/2's file system and storage management principles. But it's not. Instead, this book is written to help you improve your understanding of OS/2 in general.

The authors cover more than just file system implications, dedicating three chapters to describing efficient use of the Workplace Shell. The book also describes OS/2 details relevant for those who have worked with DOS system commands extensively.

The authors write in the introduction that the intended readers of the book are "beginning and intermediate OS/2 users." This definition of audience may be too broad, since the book presents a level of detail that the casual user could find unrewarding.

Unfortunately, they stumble at the outset. The first chapter, "OS/2 Operating System Basics," is a poor attempt to speak to both those who know nothing about the system and those acquainted with OS/2 specifically and operating systems in general. Aiming for both audiences, the authors hit neither target.

Attempting to give context to the new concepts they're pre-

senting, Dorfman and Stegman burden the reader with more reading than explanation. For example, chapter three offers the following discussion of displaying OS/2's Window List:

"The Window List also will appear if you arpeggio the two mouse buttons to form a chord. Musicians will know that an arpeggio is accomplished by pressing the two buttons in sequence, then holding them both down and then releasing them." Non-musicians will presumably know that they have to read around the metaphor.

Despite missing its target audience somewhat and going overboard on a few descriptions, this book is worth the money for an IS professional getting acquainted with OS/2. It has particularly valuable information in three chapters describing Workplace Shell usage. These chapters discuss reasons for setting up your desktop in various ways,

offering user scenarios to better explain the benefits

of each alternative.

The book also describes how to combine the use of batch files, icons, and object associations to reap powerful results. This presentation walks the reader through a simple procedure for streamlining certain tasks. The tasks they use as examples—creating disk images from .DSK files and unzipping .ZIP files—are ones the reader is likely to encounter, so the discussions should be immediately valuable. Beyond that, however, the discussion will likely fire the reader's imagination to come up with even more valuable uses for this procedure.

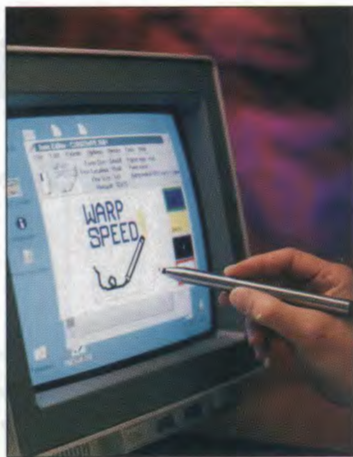
If you are familiar with DOS commands, you will find chap-



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ter eight an invaluable guide to using OS/2 commands. This chapter describes each of OS/2's system commands and its DOS equivalents. It also discusses whether such commands are best implemented through the command line or through the desktop.

The last chapter briefly discusses the software included on the disk that comes with the book. This discussion is by no means a tutorial for these tools, but it does serve as a guide for what the reader can expect from the programs, which include a fully functional demo version of BackMaster and a 16-bit version of OS2Tree, a file management program that contains a disk defragmenter for both FAT and HPFS disks. The book contains coupons for upgrading these programs, as well as a discount coupon for GammaTech Utilities (the Norton Utilities of the OS/2 world). Using any one of these coupons would save you at least the price of the book. ♦

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Multimedia Madness! Deluxe Edition

By Ron Wodaski, Sams Publishing,
1,100 pages, \$55

REVIEWED BY DONNA BARRON

Weighing in at more than five pounds, the 1,100 page Deluxe Edition of Ron Wodaski's *Multimedia Madness!* isn't a book you're likely to curl up with and read from cover to cover, but that's not what it was designed for.

An overhauled and beefed up version of the first edition (which included a single floppy disk of multimedia goodies), the Deluxe Edition and the two CD-ROMs that accompany it comprise a multimedia reference and resource that's meant to be browsed.

Although the author focuses on multimedia use under Microsoft Windows, OS/2 users who run Windows applications—and even those who don't—will find his light-hearted descriptions a pleasant introduction to this complex technology.

The book provides considerable insight into the individual components of multimedia. Chapters on sound, graphics, video, and animation are designed to prepare readers for making intelligent buying decisions regardless of operating system.

Almost 300 pages of the book are devoted to a shopper's guide describing multimedia hardware and software products. Wodaski also discusses in detail a number of software products in each multimedia category. His personal "author's choice" product recommendations appear throughout the book.

The author has provided two CD-ROMs full of multimedia files to explore. One is a special issue of NautilusCD, a CD-ROM-based multimedia magazine. The other includes libraries of sample videos, animations, photos, graphics, music, sound effects, and fonts as well as a selection of commercial software applications that you can install on your hard drive and try out.

Multimedia Madness! isn't the definitive work on multimedia computing. However, the book offers an understandable overview of the available technology and the CD-ROMs included provide an opportunity to see what's out there. Anyone who currently runs Windows-based multimedia applications or plans to do so in the future will find it a useful bookshelf reference. ♦

Donna Barron is a freelance computer writer in Hollywood, Florida.

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Six Months and Counting . . .

BY JERRY POURNELLE

There was hoopla and fanfare and dancing in the streets as IBM launched Warp. For a week before the big event it was impossible to reach any of the IBM Press Relations staff. You could get their voicemail, but the disks were full; no messages accepted. It didn't matter, because they were all in meetings, far too busy to relate to the press.

Anyone who had deadlines during the two weeks before The Big Event either wrote without information, or, more likely, didn't write about IBM at all. So it goes.

Came the Big Day. Copies of Warp had been rushed to "key" press people, but otherwise weren't available. I received a shrink-pack OS/2 Warp version 3; alas, it was an empty box, containing neither disks nor manuals. However, some journalists did get disks—with installation bugs.

The results were some pretty grim reviews.

As I write this there are IBM OS/2 Warp ads in sports magazines and newspapers and on television. Some of them are mysterious, not mentioning operating systems at all. This morning's *Wall Street Journal* had a map of the U.S. showing people who "got warped" and thus were able to do their jobs better, or were able to distribute family pictures because they were "warped."

Presumably they could do all these things through Internet connections; but the ad didn't explain that. Seems to me you have to know what the Internet is, and that Warp can get you on it, before you could understand the ad. If it had been left to me, I would probably have used the big map to get reader attention, but then included an essay explaining what the ad was about.

Anyway, the ads are out there, but as I write this there are no press copies available. I had beta copies, but I didn't get a ship-

ping copy until after I filed this column. Perversely, my son Alex was able to buy a copy of Warp version 3 before the product was recalled. He installed it for a client, and was lucky enough not to trigger the installation bug. It went well, and both he and his client like it. There are several improvements to the OS/2 interface in Warp, and that makes it simpler for beginners.

Simpler, but not simple. The ads, aimed at a mass audience, don't make it clear that you will already need to be able to deal with at least the DOS basics and probably Windows before you get Warped. That's because the new Warp includes a virtual DOS environment and you need your own Windows if you want to run Windows apps. Still, it's a good start.

IBM ads emphasize Warp's painless Internet access, complete with local access through the same network that supports Prodigy. Many analysts believe that the Killer Applications of the '90s will be ways to navigate on the Internet. The well worn route into the Internet is through Unix, the Guru-Friendly system. Warp offers another, and far less painful, route.

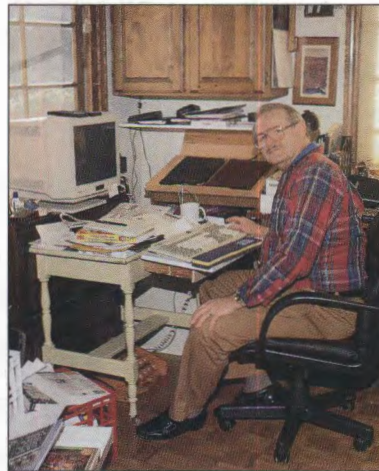
IBM lost a crucial month with its October false start, leaving about six months to win enough hearts and minds

to counter what we all know will be a superbly orchestrated launch of Windows 95 sometime next spring. Or summer.

The stakes are high. The only real rivals to Microsoft are Apple and IBM. And the only way Apple will get any great increase in market share is a deal with IBM on the PowerPC.

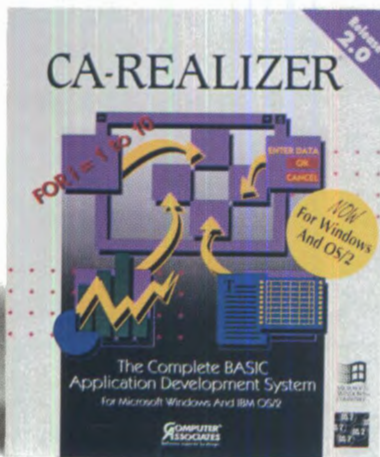
Until then, it's Warp or Windows. OS/2 proves IBM knows how to design great products. The launch shows the people there haven't learned so much about marketing. They've got six months.

It's going to be a very interesting year. ♦



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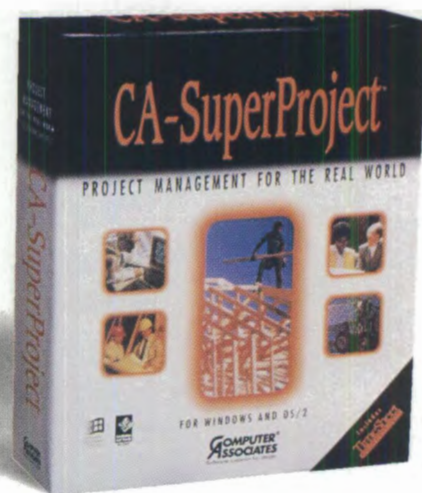
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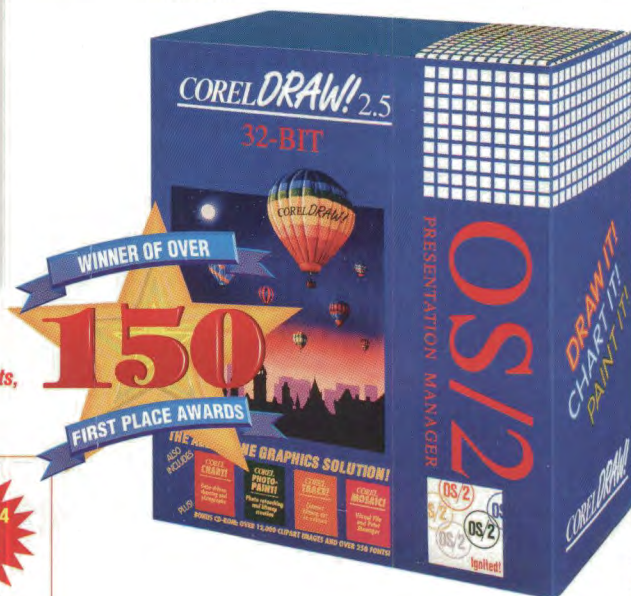
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